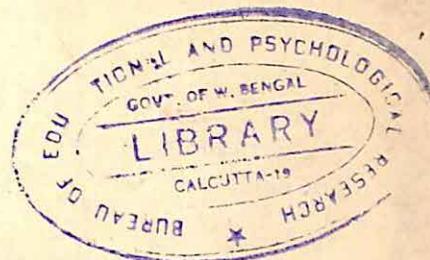


IMPROVEMENT OF CURRICULUM
IN INDIAN SCHOOL

M. HARAP

712
12.2.79



IMPROVEMENT OF CURRICULUM IN INDIAN SCHOOLS

HENRY HARAP

*Unesco Adviser in Curriculum Development to
the Central Bureau of Textbook Research,
Ministry of Education, India; Professor of
Education (on leave), George Peabody
College for Teachers, Nashville,
Tennessee, U. S. A.*



MINISTRY OF EDUCATION
GOVERNMENT OF INDIA
1959

E.D. 229
1,200

Bureau Edn. by Research
DAVID HARE TRAINING COLLEGE
Treated
Stock No.

S.C.E.R.T., West Bengal
Date 12.2.79
Acc. No. 2712

(Binding)

375
HAR

PUBLICATION NO. 389

Price. Rs. 2.75 nP or 4sh. 6d.

Reduced Price Rs. P.

PREFACE

This monograph is based upon my visits to about fifty schools in eight States and one Union territory in every part of India. I had extensive interviews with State educational officials, inspectors, headmasters and teachers. In addition, I examined all the available State syllabi, studied the procedures in curriculum development of nearly all the State departments of education, and analyzed a variety of pertinent documents.

The improvement of the curriculum and instruction was my primary concern, but a consideration of educational leadership in the professional growth of teachers was inescapable. I kept the Indian conditions constantly in mind and, as far as possible, I tried to suggest practicable solutions to the educational problems. I have great faith in the devotion and competency of the leaders who are steadfastly devoting themselves to the gigantic task of building the educational foundations of a proud and free people.

This study begins with a consideration of the peculiar conditions which affect the curriculum of Indian Elementary and Secondary schools. Before undertaking to discuss the curriculum, a number of basic factors are considered in an Indian setting. An analysis is made of the Elementary, Basic, and Secondary school curriculum, with a chapter devoted to each. The present effort of the State departments of education to provide for the professional growth of teachers and administrators is then examined. Finally I try to show how State departments of education will have to play a more important role in the gradual adjustment of the curriculum to the changing conditions of Indian life and culture.

I wish I could enumerate the scores of kind and cooperative persons who took time out of busy days to give me useful information. I am extremely grateful to the teachers whose classes I observed and to those who arranged for my visits. I hope my occasional critical comments will not conceal my deep respect for their brave and fruitful efforts.

I wish finally to express my appreciation of those with whom I was closely associated and to whom I continuously turned for guidance: Mr. K. G. Saiyidain, Dr. Gordon N. Mackenzie, Dr. R. K. Bhan, Mr. Veda Prakasha, Dr. (Miss) K. Thairani, Dr. (Mrs.) Rukmini Krishnaswamy, Mr. D. N. Gaind, Mr. B. S. Parakh, Dr. U. C. Tripathi, Mr. V. N. Wanchoo, and Mr. G. C. Sharma.

FOREWORD

I have much pleasure in introducing this brochure to the public. It relates to a subject which is of primary importance in any scheme of educational reconstruction and it presents a picture of the curriculum in Indian schools—Elementary and Secondary—as seen by an outsider.

The author, Dr. Henry Harap, is well known in the United States as a specialist in Curriculum Construction. He came to India in January, 1957 under Unesco's Programme of Participation in Member States' Activities and worked at the Central Bureau of Textbook Research for one year. In the course of his stay Dr. Harap visited a number of schools in India and had many discussions with the officials of the State education departments and teachers and headmasters of schools on important educational problems. He also made a study of all the available State syllabi. The present monograph is based on his study, visits to schools, and interviews with persons directly connected with education. Among other things it is an appraisal of the current curricular practices in the Elementary and Secondary schools of India. Each chapter is concluded with a list of suggestions for effecting improvements. The analysis of the problems and the views expressed in this brochure represent the views of the writer, but they are of special value to us as affording an opportunity of seeing things from another's angle which is more objective and detached.

PREM KIRPAL

Educational Adviser to the Government of India

New Delhi

December 12, 1958

CONTENTS

CHAPTER	PAGE
I. CONDITIONS AFFECTING THE CURRICULUM OF INDIAN SCHOOLS	1
The System of School Classes	2
The Private School in Transition	2
The Examination System	4
The Role of Textbook	7
Summary and Recommendations	9
II. BASIC FACTORS IN THE IMPROVEMENT OF THE CURRICULUM	11
Social Responsibility of the School	11
General Aims and Guiding Principles	13
A Balanced Total Curriculum	14
Nature and Function of Subject Matter	16
The Improvement of Learning Activities	17
The Basic Learning Unit	21
The Learning Environment in Indian Schools	23
Summary and Recommendations	24
III. ELEMENTARY SCHOOL CURRICULUM	26
A Balanced Elementary School Curriculum	26
General School Policies	27
School and Classroom Library	29
Teaching of Languages	30
The Teaching of English	33
Mathematics	35
Social Studies	36
Science	39
Expressive Arts	40
Physical Training	42
Summary and Recommendations	43
IV. BASIC EDUCATION	45
Theory of Basic Education	46
The Total Curriculum of Basic School	47
Some Special Aspect of Basic Education	52
Summary and Recommendations	56
V. SECONDARY SCHOOL CURRICULUM	57
Some General Considerations	57
An Appraisal of the Secondary School Curriculum	59

CHAPTER		PAGE
	Improvement of the Learning Process	62
	Improvement of the Total Curriculum	65
	Summary and Recommendations	70
VI. THE PROFESSIONAL GROWTH OF TEACHERS		72
	The Role of State Department of Education in Instructional Improvement	72
	Function of the Inspector	77
	Educational Leadership in the Individual School ..	79
	Summary and Recommendations	80
VII. CURRICULUM DEVELOPMENT IN INDIAN STATES		82
	Production of Elementary School Syllabi	82
	Production of Secondary School Syllabi	83
	Nature and Use of the Syllabus	84
	Review of Better Syllabi produced by Three States ..	86
	A New Experience in Curriculum Planning	86
	Participation of Teachers in Curriculum Planning ..	87
	Suggested Procedure in the Production of a Syllabus ..	88
	Curriculum Planning is a Cooperative Enterprise ..	90
	Curriculum Planning requires Educational Leadership ..	91
	Curriculum Development releases Creative Talents of Teachers	93
	Summary and Recommendations	93

CHAPTER I

CONDITIONS AFFECTING THE CURRICULUM OF INDIAN SCHOOLS

The Constitution of India affirms that "The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years."*

The Second Five-Year Plan provides for free education for 63 per cent of the children from six to eleven years and 23 per cent of the children from eleven to fourteen years of age by 1960-61. While the goal set by the Constitution will not be reached, steady progress is being made. The States have more than doubled their allotments for education since 1951-52. The children are flocking to school as fast as new schools are opened and many more teachers are being trained to care for them.

The Government of India has given financial assistance to the States for converting existing schools into Basic schools and for the opening of new Basic schools. The Secondary schools are gradually being converted from college preparatory institutions to Multipurpose High schools. The All-India Council for Secondary Education is continuing its programme of extension services in 23 colleges. It has conducted seminars and workshops in various States.

The Central government is giving the highest priority to the improvement of the quality of the teacher. In 1956-57 it appropriated nearly Rs. 77 lakhs to match the expenditure of State governments for the increase of salaries for Primary teachers.

The education of girls has lagged behind the education of boys, but the Central and State governments are taking steps to remedy the situation. Plans have been prepared to provide free housing for women teachers in rural areas and to award scholarships to girls in Training colleges.

India is giving major attention to the Second Five-Year Plan, the objectives of which are to increase the national income, to enlarge production, to reduce unemployment, to mechanize some of its industries, to increase food production, and to raise the standard of living of the people. Large sums of money are being invested in irrigation, power, transportation, and roads. Nevertheless, the education of children and adults is an integral part of the building of a new nation.

India cannot solve all its problems immediately. Educational conditions will improve with the economic growth of the country as a whole. In the meantime, public education must move forward. India has its own enlightened critics but out of my experience in objective analysis of educational systems in the United States, I humbly present this informal survey.

*The Constitution of India, Part IV. Paragraph 45.

The System of School Classes

The number of classes at the Primary, Middle and High/Higher Secondary stages in schools in India differs from State to State. During 1954-55, the duration of the Primary stage was generally of five years—in some States it was of four, while in others of six. The Middle stage consisted of three classes in most of the States and of two or four in others. Taken together, the Primary and Middle stages comprised an eight years' course in all but three States where it varied from six to seven years. The High/Higher Secondary stage, which is the final step in the ladder of school education, consisted of two classes in some States and three or four in others, so that the entire High school course comprised 12 classes in 4 States, 11 classes in 10 States and 10 classes in 13 States. In Delhi two different systems of school classes *viz.* High schools with 10 classes and Higher Secondary schools with 11 classes functioned side by side.*

In 1956, the school authorities in West Bengal decided to convert the schools gradually into eleven-year schools of two types.† The first type consists of a Primary section of 5 classes (I—V) and a High school of 6 classes (VI—XI). The second type consists of a Junior High school of 8 classes (I—VIII) and a High school of 3 classes (IX—XI) with diversified courses.

In 1957 the Madras school system was in the process of reorganizing its whole school course into an Elementary section of seven years followed by a Higher Secondary section of four years.

While the organization of a school into educational divisions is no guarantee of the unity or continuity of the curriculum, I incline toward the policy of a single school with a Primary section of five classes and a High school section of six classes. The reduction to two stages of Elementary school and High school has the advantage of unifying the curriculum of the lower five classes and the upper six classes under common leadership, common point of view, and also gives a greater assurance of continuity from grade to grade.

The growth of the child is a gradual and continuous process and the same is true of the programme of schooling. There is no sharp break in the individual development or in the educational programme at the end of the fifth or the eighth grade. The unification of the Middle school and the High school removes the friction that sometimes exists between these two separate units. It makes the resources of a six-grade range available. This gives greater flexibility to the curriculum. When the Primary and the High schools are located in the same place, it is desirable to have one principal at the head of the eleven-year school and a head teacher with major responsibility for the Primary school.

The Private School in Transition

The private school in India presents a problem with which the government will have to wrestle for several decades as it moves toward the development of free and universal education. The word private school here refers to the privately managed school which receives government aid as well as to the one which does not. It also

*Education in India—A Graphic Presentation. Ministry of Education, 1956, p. 51

†Secondary Education, October, 1956, p. 23.

includes the public school which is designed to serve the upper social and economic class. The parent of the child who attends a private school pays a tuition fee varying from Rs. 2/8/- to Rs. 30 per month. At present nearly all private schools receive up to 90 per cent of the annual cost of their operation in government aid.

The private schools have their strengths and their weaknesses. Some of them employ superior teachers, set higher standards of achievement, have better facilities, offer a richer programme of co-curricular activities, and are more efficiently managed. On the other hand, they may be highly regimented, may be slow in adapting to Indian culture, may focus all studies on external examinations, and may subject the students to undue learning pressure.

The better private schools conducted by independent organisations, the church, and Christian orders or societies, are superior to government schools. The Delhi Directorate of Education recognised this superiority when it established the Government Model School after the pattern of the public school. In conversation with headmasters and teachers, a variety of explanations were given for the superiority of the respectable private schools. It was said that higher salaries attracted better teachers; additional special teachers were employed; the schools had better facilities; the teachers maintained stricter discipline; and the co-curricular programmes were richer. In addition, many parents craved the social prestige attached to the patronage of the private school.

The medium of instruction in the more exclusive private schools is English. In others, the teaching of English begins in the first class. The discontinuance of English as the second language in the early classes of government schools has created a great demand for attendance in schools where English is the medium of instruction. I visited one school in which the clamour for admission was so great that in spite of an enrolment of sixty children in some classes, the headmaster had a waiting list of 2,000 names.

Some of these schools are highly regimented and some are surprisingly free. The better private schools are more efficiently managed. The teachers are more dependable, prompt, and responsible. It is my own opinion that while schools need to cultivate the virtues of responsibility, dependability and industry, the pupils should not be forced to ape regimentation, docility and subservience to teachers and principals. The relation between pupil and teacher should be based upon mutual respect and greater equality.

The alien influence of some of the private schools will undoubtedly be questioned by Indian educationists. The purpose of an unaided Higher Secondary school was to prepare for the Cambridge Examination for Overseas which, according to my guide, was essentially the same for the British students. The needs of boys and girls cannot be determined several thousand miles away. This policy is clearly out of date. To paraphrase an old American rallying cry, examination without representation is tyranny.

The private schools are undoubtedly conforming to new patterns of compulsory and optional subjects recommended by the departments of education, but whether the content of these subjects is related to contemporary life and the emerging culture is questionable. For

curriculum improvement, it is necessary to implement the recommendations of the Report of the Secondary Education Commission as quickly as possible.

In some of the private schools, the children are pushed to learn what is beyond their capacity. The results of research show that training is more effective when the individual is ready for it. To begin training before the child is ready for it has very little ultimate value. Furthermore, the mature child does not run the risk of forming such harmful habits as reading by pointing to words or adding by counting the fingers. I doubt whether all children are ready to begin to read at the age of five years. If allowed to begin when ready to read, they will quickly catch up with those who begin earlier. The same is true of children of five years of age who are required to multiply five-place numbers by two-place numbers.

The Examination System

The examination system has become the dominating influence in the educational life of the students and teachers. It determines what should be taught and, indirectly, how it shall be taught. The public final external examinations are of great concern to the students and their parents because there is a close connection between employment and the marks on these examinations.

Examinations in the Secondary school are both internal and external, that is, they are prepared by examiners within the school and outside the school. The internal and external examinations follow the same general pattern but differ in their major functions. The external examinations come generally at the end of the High school course (tenth class) or at the end of the Higher Secondary school (eleventh class). These are designated by a variety of terms, such as matriculation or university entrance examination, the school final examination, or the school certificate examination.

The examination system was conceived as an instrument primarily designed to serve the university and business. This would be justifiable if this function coincided with the primary aim of the school, that is, the fullest development of the individual for a good life. Unfortunately, this is not so. The objective observer is led to conclude that the university and business should not continue to exploit the school to serve their ends; they should not use the school as an institutional device for the selection of qualified students and employees. The education of youth for good living would be greatly advanced if the university and the business community could be persuaded to design and conduct its own machinery for the identification of persons of superior intellect.

The examination system has been critically studied in a variety of books and articles, the most notable of which is the *Report of the Secondary Education Commission* published in 1953.

The Examination Committee of the All-India Council for Secondary Education has given serious attention to the improvement of examinations. At a recent meeting, the Council adopted the Committee's recommendation to set up an Examination Unit for the purpose of preparing helpful test materials. Ultimately it hopes to advise the States' boards of Secondary education on the improvement of instru-

ments of evaluation. The Committee reports that some minor reforms have already been introduced by a few State boards of Secondary education.

Every Secondary school administers annual internal examinations. In addition, some schools give examinations at the end of each term and other schools also give monthly tests. The internal examinations are conducted for the purpose of grading students and to determine whether they should be advanced to a higher class. The promotion of the students usually depends upon the results of the annual examinations, although a few schools also take into account the student's performance in terminal and monthly tests.

The Inadequacy of the External Examination

I shall confine my discussion to the inadequacy of the external examination. But, in general, the internal examination suffers from the same maladies. My reactions may be briefly summarized as follows:

1. The control of final examinations in the Secondary schools is vested in a board which is external to the school system and to the school itself. The examination is not taken by the teacher who taught the class and knows the students. The school is restrained from adjusting the curriculum to the conditions of the neighbourhood which it serves. The teacher is not free to experiment with improved methods of teaching.
2. The examination comes at the end of the school course, not in stages. Waiting for two or three years to discover whether the students will pass a series of comprehensive final examinations is a tragic waste of human effort as well as the productive power of youth. Those who face inevitable failure should be required to withdraw from the school.

The annual examinations have not succeeded in eliminating the unfit students. Some students who fail in class IX and X drop out but the boys face unemployment as the only other alternative. This they reject in favour of repeating the class.

3. The examinations are prepared by outside experts who are primarily scholars. They have no other choice except to follow the outline of topics in the syllabi. Consequently the examination does not necessarily test for the achievement of the objectives of the courses.
4. The examination tests only for range of information, that is, for factual knowledge. It does not take other measures of achievement into account, such as, the performance of an activity; the ability to perform an experiment; the ability to make a spoken report; the ability to do creative thinking or to solve a problem; the ability to apply information to real situations in life; the ability to participate in group discussion; the interest of the student; and the seriousness of the student's attitude toward his subject.

5. The final examination tends to keep the curriculum within narrow limits. While the examination board accepts a large number of optional subjects, the resources of the school force it to offer the compulsory subjects and a few optional subjects.
6. The external control tends to make the headmaster docile, submissive, and tradition bound. Often he has no sense of direction and may not be able to give much attention to the improvement of teaching.
7. The passing mark of 33 per cent is too low. Achieving a standard of 33 per cent of the mastery of a subject is not real learning. The present mark gives no indication of the quality of the work. It would be more useful to convert the numerical scale into a qualitative scale using the letters which stand for excellent, good, fair, and poor.
8. The publication of names and grades in the daily papers creates fears, tensions and anxieties. Since the names of the candidates are classified by the schools, it undoubtedly stirs up rivalries among the schools. It is quite natural for each school to wish to excel others. The total effect is to exaggerate the importance of the examinations.

The purposes of Evaluation of the Results of Learning

The function of the examination should be considered in the broader context of appraisal and guidance of the students. The purpose of evaluation is: to find out how much the learner has grown; how much progress he has made; whether the learner has achieved the goals of the unit or course; what the learner's weaknesses are and how to correct them; and what the learner's strengths are and how to encourage them.

The evaluation of the student's achievement is impossible unless the teacher or the examiner knows what the instruction was designed to accomplish, that is, what the objectives of the course were. The construction of instruments of evaluation is not simple, but fundamentally the process consists of two major steps: first, determine what the objectives or goals of the courses are; second, decide how to measure the growth toward the accomplishment of these objectives or in other words, design instruments or means of evaluation. Thus the examination or test is the instrument which measures the degree to which the student has achieved the goals of the course or subdivision of the course.

In her presidential address to the fourth conference of the principals of Training colleges held on May 6, 1957, Mrs. Hansa Mehta, Vice-Chancellor, Baroda University, is quoted as saying that the teachers "should have clear objectives in teaching a subject and evaluation should take into account the knowledge, the behaviour changes and attitudes that the learning process brought about."

The new regulations of the Punjab School Board contain a provision for internal assessment amounting to 25 per cent of the aggregate marks. The Vice-Chancellor of Punjab University, head of the

School Board, goes on to say, "We may also look forward to the day when some schools would be given powers to assess the work of the students entirely by themselves and external examination of the type we have at present will disappear."*

It is hardly possible to describe the techniques of text construction but the All-India Council for Secondary Education as well as the Training colleges are beginning to give attention to this process. There is no doubt that the examinations will undergo a considerable change in the next decade.

The Evaluative Procedure in the Guidance of the Student

The guidance of the student should be an outcome of the broader evaluative procedure. Guidance here is used in the sense of helping the pupil to make important decisions. The student will probably need guidance in his choice of courses; in the selection of a field of specialization; in the selection of an occupation; in the choice of extra-curricular activities; in the improvement of health and physical fitness; in his social development; and in overcoming his emotional difficulties.

Every student should have an adviser. In addition to the student's scores on examinations, the adviser should, if possible, accumulate such records as: the student's mental ability; his score on standardized achievement tests; his physical characteristics; his social traits; evidence of his special interests and talents; and also his weaknesses. In due time, the Secondary schools and universities will develop inventories and vocational aptitude tests which are helpful in the occupational guidance of the students.

I visited a good school in Calcutta which employs a psychologist who has developed cumulative records, administers tests and handles problem boys. For the purpose of testing intelligence, he uses a test in Hindi which was prepared by the Bureau of Vocational Guidance in Bihar. The establishment of such bureaux will in time fill a great need for the adjustment of adolescents to the problems of youth. The Ministry of Education, recognising the need for counselling has established a Central Bureau of Educational and Vocational Guidance in Delhi which should help the schools of India to perform this important function.

The Role of Textbook

The textbook is one of the most dominant factors in the education of children and youth in the schools of India. As pointed out elsewhere, the teachers adhere rigidly to the textbook. This is a particularly critical problem because the textbook is a subject of common criticism in the daily press as well as by the teachers and administrators. To illustrate I quote one headmaster, "The accuracy is shaky and some books are not well graded. The books in geography are obsolete. The grammar, literary style, format and the quality of the paper are not up to the best standard."

*Joshi, A.C. "New Pattern of Secondary Education in Punjab". August 1957. p. 9

One reason given for the slavish use of textbooks appears to be the lack of competent teachers. The agenda of the Advisory Board of Education in Punjab reads, "It should not be forgotten that the general level of intelligence of our teachers of Primary classes is not very high and that they find it extremely difficult, if not altogether impossible, to teach history, geography and civics, which go to constitute the present-day subject of social studies, without the help of a textbook in the case of 5th class students."* I have seen the textbook-centred method followed by qualified as well as unqualified teachers which leads me to conclude that the danger lies in crystallizing the process into a fixed teaching procedure.

The books used in teaching English were almost always based on life in Britain. They often contained habits of living and environmental situations that were foreign to the children. The books included words and idioms which were difficult to explain in terms of the children's normal surroundings. It seemed to me that the children ought to read and speak about their own places, persons, and things. Apparently this condition applies not only to English but also to other subjects. To this end, the Ministry of Education, Government of India, has recommended in a letter issued to all State Governments that "textbooks and syllabi prescribed for various courses and other books generally read by our students should provide adequate material on Indian culture, eastern thought and personalities."

While educationists are members of the textbook committees of the Indian states, most of them are not practising teachers of pupils for whom the book is written. The specifications prepared for the guidance of authors are helpful in a general way but are greatly in need of improvement. The score sheets that I have examined contain duplications and omissions of important items. The criteria are usually not weighted thus making it difficult to choose between closely competitive books. Some criteria are too vague and general to give a usable quantitative or qualitative rating. The criteria are poorly organised under headings and sometimes the headings are completely omitted. The technique of preparing textbooks is in a formative stage and will undoubtedly be given the needed attention in the next few years.

The Function of the Textbook

The textbook should contain the basic information needed in the subject. It is not an end in itself. Additional sources of information are needed to obtain another point of view; to add information not contained in the text; to correct errors of fact in the text; and to bring new information up to date. Several States have socialized the production and distribution of their own textbooks. The assistant director of books in one of these States frankly admitted that the "quality of textbooks has not been very good so far because the State has not had much experience." Since it was the first attempt, he was sure that the textbooks would be decidedly better in the future.

*Agenda for the Meeting of the Punjab Provincial Advisory Board of Education to be held on the 27th September, 1957.

The slavish adherence to the syllabus makes it necessary to employ writers who produce books on order. The textbook committee expects the author to submit the manuscript in a short time. Under these circumstances, the book is not always satisfactory either in content or in literary style. The process of editing a book is a highly professional service requiring special competence. The supervision of the writing of textbooks in most subjects is assigned to individuals and groups who have no special training for this task.

In India, the editorial supervision of a textbook by a qualified editor is very limited, perhaps non-existent. The specifications prepared by the department of education are helpful but are not a substitute for editorial guidance. Freedom from the rigid limits of the syllabus would enable the States to adopt textbooks of the highest quality in the open market. This would not interfere with the printing of books by the States. The State could make a contract for the production of specific quantities of good books available from private publishers. Furthermore, such books could be adapted to the special needs of a particular State.

The policy of approving more than one textbook (multiple adoption) such as is now followed by the Madras Board of Secondary Education would allow greater freedom of choice. It would also allow the school to purchase several collections of textbooks for use in the classroom. This policy has been tried out by two Government High schools in West Bengal whose experiments along these lines have been very encouraging. The performance of the boys in the final examination was reported to be satisfactory.

Summary and Recommendations

1. The private school should be adapted to Indian culture and should gradually be released from the domination of the external examinations.
2. The private Secondary school should make a more serious effort to implement the recommendations of the Report of the Secondary Education Commission.
3. While the government school could emulate the virtues of responsibility, dependability and industry of the private school, it should not ape its regimentation, docility, and subservience of pupils to teachers and principals.
4. The relation between pupil and teacher should be based upon mutual respect and greater equality.
5. The external examinations should gradually give way to tests prepared by the teacher of each class to determine the student's progress toward accomplishment of the objectives.
6. Examinations should be given in stages instead of keeping the student waiting for two or three years for the final verdict.
7. The examination should test not only for factual knowledge but also for the ability to solve problems, to apply information to real situations in life, and other measures of achievement.
8. The results of a test should be converted from a numerical score into a qualitative scale using the letters which stand for excellent, good, fair, and poor.

9. In order to remove fears, tensions, and anxieties, the publication of names and examination grades in the daily papers should be discontinued.

10. The books used in teaching English should be based on Indian life. The children should read and speak about the places, persons and things in their environment.

11. The personnel of textbook committees should include the practising teachers of pupils for whom the books are written.

12. While specifications prepared for the guidance of authors are helpful, the score sheets are greatly in need of improvement.

13. The textbook committee should give the authors sufficient amount of time to submit manuscripts which are satisfactory in content and style.

14. The supervision of the writing and selection of textbooks should be assigned to individuals who have special training in this task.

15. To give the schools greater freedom of choice, a policy of approving more than one textbook (multiple adoption) should be gradually introduced.

CHAPTER II

BASIC FACTORS IN THE IMPROVEMENT OF THE CURRICULUM

Before proceeding to discuss the improvement of the curriculum, it is necessary to consider a number of basic factors in an Indian setting. The social ideals of education stem from India's culture and aspirations. The curriculum is an outgrowth of life in democratic India. The beginnings of social analysis have been made by some of the educational commissions in India. The programme of education is based upon the broad aims of the school, the design of the curriculum, the nature of subject matter, and the conception of the learning process. These factors will be considered in this chapter.

Social Responsibility of the School

Indian Social Ideals give Direction to its Schools

The social goals of education in India are imbedded in its culture, in the aspirations of its founding fathers and in the matrix of the new-born democratic State. The ideals of social justice, freedom of speech, equality of opportunity, and national unity embodied in the Indian Constitution should be woven into the educational creed of the Indian schools.

"Seven years of freedom have thus been seven years of endeavour and expansion in Indian education. Achievement of independence set before the people new objectives and imposed on them new responsibilities."* Growing out of a recognition of political freedom in India, the Secondary Education Commission calls attention to the need of education for democratic citizenship, productive efficiency, and cultural development.

Quoting Mahatma Gandhi, the introduction to the first syllabus in Basic education states that, "Education covers the whole field of life". It then goes on to say, "Education thus conceived becomes co-extensive with life itself—with cleanliness and health, with citizenship, work and workmanship, play and recreation—all this, not as separate subjects of the syllabus but as inter-related processes for the development of a harmonious and balanced life.

"The ultimate objective before this 'New Education', however, is not only a balanced and harmonious individual life, but a balanced and harmonious society—in Gandhiji's words, 'a juster social order in which there is no unnatural division between the 'haves' and the 'have nots' and everybody is assured of a living wage and the right to freedom.'

"The educational process in *Nai Talim* is therefore directed to the development of this type of individual and this 'juster social order'."

The Curriculum is based on an Analysis of Living

Before curriculum planners can design a programme of education they need to know how the people live; how they govern themselves; how they earn a living; how they play; how they use their resources; and how they associate with each other. A curriculum based on

*Kabir, Humayun, "Education in New India", George Allen & Unwin Ltd., London, 1956, p. 20.

such a process should challenge many teachers to do their part in raising the standard of living of the families in the region which they serve.

The growing person needs to do well all the things which make a full and balanced life. He needs to get along with his neighbours, attain good health, play vigorously and joyfully, add to the beauty around him, value good workmanship, understand current affairs, share the work of the home, join in the life of the community, enjoy companionship of a good book, talk and write clearly and fluently, become a productive worker, share the duties of citizenship, keep up with new inventions and discoveries, and share in preserving Indian democracy.

The rapidity of social changes makes special demands upon the modern school. There is a need to give greater attention to those aspects of daily living which have been deeply influenced by invention, by economic change, and by new means of communications and transportation. Social change demands that the young people should have an opportunity to go to the bottom of community problems. It should be the function of the school to equip youth to do their part in solving the problems of this generation. As a potential citizen he needs to have the will to play a more active role in attaining a higher standard of living not only for himself but also for all the people. He needs to learn that the groups that make up the community must work together for their common good; that the large communities must work together for the peace of the world.

Curriculum Planners in the United States have made Social Surveys

In the United States many individual schools and school systems have made elaborate surveys of the social and economic life of the people as a basis of planning a curriculum for better living. The analysis of life into its major areas of living included home life, citizenship, leisure, production, consumption, transportation and so on. Each major area was then subdivided into hundreds of specific activities to discover how the school could improve living. These became the specific objectives of education.

Following the pattern of social anthropology, at least a half dozen States made exhaustive studies of the major social functions. I myself spent two years of my professional career making a study of consumption habits in order to learn how the school should help the people to improve the purchase and use of food, clothing and shelter.

The curriculum consisted of the problems of living. Sometimes they were introduced through the existing subjects and sometimes through a new large segment of the curriculum called social living. The core of social living is a continuous sequence of large on-going projects which contribute to better living in the homes, schools and community.

Beginnings of Social Analysis have been made in India

Speaking from my observation of educational conditions in India, I can say that some beginnings of social analysis have been made. The National Institute of Basic Education is engaged in a

project to develop a curriculum for Basic schools. It asks the selected teachers and headmasters of Basic schools to indicate the relative importance of the following areas of living: life and health; making a home; social and civic life; making a living; developing scientific attitudes; satisfying aesthetic needs; recreation; morality; and religion. It subdivides each area of living into specific activities and asks the teacher to approve or disapprove the items and to add others. The teacher is then asked to give his suggested content for each of the following subjects; mother tongue, mathematics, social studies, general science, art, physical activities, crafts, and Hindi. Finally the teacher is asked to indicate what areas of living or specific activities he proposes to cover during one academic session. This investigation may have its imperfections and its outcome may be fragmentary. Nevertheless it makes a bold approach through an analysis of life for curriculum improvement.

The Report of the Secondary Education Commission published in 1953 begins with an appraisal of the existing situation. "Firstly, the education given in our schools is isolated from life—the curriculum as formulated and as presented through the traditional methods of teaching does not give the students insight into the analysis of life for curriculum improvement.

Later the Report lays down certain basic principles among which the Commission postulates that "the curriculum must be vitally and organically related to community life" (page 80). This view presupposes an analysis of the life of the community, a task which apparently is left to the social analyst of the future for the Commission envisages a new grouping of subjects into broad fields "which can be correlated better with life" (page 81). What will be accomplished, only the future can tell.

Some syllabi seem to be based on Current Living

The syllabus in social studies for class IX published by the Government of Kerala in 1956 is based upon current living. The inclusion of such topics as, the family, the people, economic life, political life, etc. imply that at least a rough analysis of current social life in India should precede the formulation of the course.

The Punjab syllabus for Primary classes issued in 1950 contains an outline of topics for *The Activity Hour* which revolves around the following centres of interest: class I, Home and Families; class II, Our Homes and Our Neighbourhood; class III, Our Clothing; and class IV, Our Food. The subject of social studies is concerned with contemporary life in the village, town and district. Unfortunately, the activities and social studies as conceived in the Primary schools are virtually discontinued in the Middle school.

General Aims and Guiding Principles

Each school system, and for that matter, each individual school should undertake to determine its broad aims and guiding principles. The headmasters and teachers whom I interviewed were somewhat vague in stating the aims of their schools. The external controls

tended to make them docile, submissive, and tradition-bound. They had no clear understanding of the relative importance of the subjects. They were not aware of the basic principles underlying the compulsory and optional subjects. When I asked why English should be given two times as much emphasis as science, they were unable to give a satisfactory explanation. The syllabi were of no help to them, for very few of these manuals contained a statement of aims or guiding principles of education.

The aims and principles of education set forth in the Report of the Secondary Education Commission published in 1953 (pages 85-86) are a good model for any school system. The principles need not be accepted *in toto*. They can be used as a basis for discussion, adopting what is acceptable, rejecting what is not acceptable, and modifying what is only partially acceptable.

A school system or an individual school may wish to make an independent approach to the formulation of a point of view. I visited two schools which had developed their own syllabi. These schools, I assume, had an opportunity to formulate their own statements of guiding principles. This is a highly desirable approach because it gives the teachers a common point of view and a common goal toward which they can work cooperatively. It is not enough for a few leaders to frame the educational philosophy of a school organisation. It is necessary for all teachers to share in the discussion of the basic principles. Only in this way is the thinking of teachers reconstructed.

The process of formulating a statement of guiding principles begins with the identification of the most important issues. These are discussed thoroughly allowing for a free expression of differing points of views. When some agreement is reached, a brief and simple statement is prepared showing the position of the group on each issue. Finally, as the principles emerge, they are recast into a coherent declaration of policy.

A Balanced Total Curriculum

Curriculum planners in India have given very little attention to balance in the total life of the school. In the early stages of the preparation of syllabi, the working group should sketch the total curriculum in broad outline. My own tentative framework or design of the whole curriculum is set forth in the following chart. (page 15). Balance is achieved by allotting a portion of time to social living, daily routine activities, expressive arts, basic skills, and special interests. As the grade level increases the time devoted to the basic skills decreases and the time devoted to special interests increases.

A balanced school life usually results from a flexible programme organised around the five major phases. *Daily routine* includes those recurring activities which are a part of everyday living such as rest, lunch, assemblies, and housekeeping. The framework of *social living* (core) suggests, grade by grade, what problems should be studied in each of six areas of living: home life, recreation, citizenship, economic life, transportation, and communication: reading, writing, speaking, listening, and figuring. *Expressive and creative activities* include arts crafts, stories, music, dance and dramatics.

BALANCE IN THE TOTAL LIFE OF THE SCHOOL

DAILY ROUTINE ACTIVITIES	SOCIAL LIVING (CORE)	SPECIAL INTERESTS	BASIC SKILLS	EXPRESSIVE ARTS
Primary School	Devotional Rest Lunch Assemblies Housekeeping	Individual Needs Optional Subjects Co-curricular Activities Vocational Needs Humanities Sciences Technical Commercial Agriculture Fine Arts Home Sciences	Reading Writing Speaking Listening Figuring	Arts Crafts Stories Music Dance Dramatics
Middle School	Citizenship Economic life Transportation Communication			
High School				

The special interests provide for the purely individual needs and concerns of the learner in contrast with those which all pupils have in common.

For convenience in making a critical analysis of the total curriculum in Indian schools, I shall use my suggested framework as a point of departure. Later, a more detailed analysis will be presented separately for Elementary and Secondary schools. The traditional Primary and Middle schools devote an excessive amount of time to drill on the basic skills of communication while social living, reading for enjoyment, and the expressive arts are neglected. The study of the natural and physical environment is completely neglected in some Primary schools, and under-emphasised in others. The Middle schools do not give science the emphasis it deserves. Despite the important role that the natural environment is supposed to play in Basic education, the study of science is completely under-emphasised in the time-table of the Basic schools. With the exception of drawing, the aesthetic development of the child is neglected.

The High school curriculum neglects the expressive arts, the problems of Indian democracy, and the special interests. The High school overlooks those students who will pursue careers in home making, farming, trade, and office work. There is a need for greater emphasis on self-government, industrial arts, and co-curricular activities. Some schools neglect games and physical exercise. There is a need for the addition of practical subjects, such as wood work, metal crafts. The pupils who will probably engage in clerical work should have training in typing or office work.

The Commission on Secondary Education has not only summarized the deficiencies in the Secondary school curriculum but also has proposed an outline of a balanced curriculum for the Middle schools and High schools. These proposals should be more widely studied by the personnel of the State education directorates, Secondary schools, and the Training colleges.*

Nature and Function of Subject Matter

In the Indian schools that I have observed, subject matter is limited wholly to what is contained between the covers of the prescribed textbook. In the true sense of the term subject matter consists of the information and skills which help the group to solve its problems or to achieve its goals. To make the meaning of subject matter more definite we may break it down into four parts:

1. Basic skills, such as $2+2=4$ or ability to use a saw;
2. Expressive arts, such as, singing a song or making a clay bowl;
3. Facts, such as, dark walls absorb light while white walls reflect light;
4. Generalizations, principles, or laws, such as, nature abhors vacuum.

*Report of the Secondary Education Commission, 1953, pp. 74, 83, 86 and 87.

There are a variety of sources of subject matter, such as authoritative sources of information consisting of books, pamphlets, documents, magazines, newspapers, maps and so on. In addition, one may acquire knowledge through practical experience, experiments, field trips, interviews with informed persons, motion pictures, recordings, and other audio-visual aids. "Our greatest weakness", said the deputy director of public instruction, "is want of practical application of knowledge. Basic education is doing better than the Primary school in the application of knowledge."

The enrichment of the sources of information in Indian schools may be slow in development but when they become available the children will read not only to recite but also to solve problems. The classroom of the future, I trust, will be equipped with a fairly large collection of books and pamphlets accumulated gradually by the teacher and the pupils.

Over the years, the number of subjects has grown in proportion to the fragmentation of knowledge by an increasing number of specialists. Only ten days ago I sat beside a boy in the fifth class of a public school and asked him to show me his textbooks. As he proceeded to unload the contents of his little desk, he said casually, "I have 19 books."

In 1902, while serving as a school director, John Dewey said, "He (the pupil) goes to school and various studies divide and fragmentize the world for him." Fundamentally the situation has not changed very much in India or in the United States. "Instead of treating the different subjects in the school curriculum as distinct and isolated items, every attempt must be made to bring out their correlation and unity."*

The pupil in some of the Primary and the Middle schools which I observed is confronted by about 13 subjects, each taught separately. There is a promising counter-tendency in India to unify the subjects of the curriculum. The urban schools have accepted the principle of fusion of history, geography and civics. The Basic schools have accepted the principle of correlation with craft and also with the social and natural environment. This should lead to the fusion of related subjects into fewer groups with greater teaching flexibility.

The Improvement of Learning Activities

In the Elementary classes learning is predominantly verbal. The children generally are engaged in reading, writing, listening and answering questions. Some teachers have successfully introduced active learning. The activities of the children in one class included action games, songs, conversation and dramatization which relieved the strain of constant intellectual activity. Although there were no childlike uninhibited outbursts of emotion, the games and action songs served as a release from tension.

Adjustment to Individual Differences

As far as I could observe there is no formal attempt to adjust learning to individual differences. For example, the children in class I

*Kabir, Humayun, "Education in New India", George Allen & Unwin Ltd., London, 1936, p. 7.

which I visited fell into three groups. Three pupils were six years old; six pupils were five years old; and five pupils were four and a half years old. Admittedly the problem of adjusting to individual differences in this situation is very difficult. Nevertheless, the pupils were taught to read English as one group.

The bright child is not challenged to perform to his fullest capacity. The slow child has great difficulty in keeping up with the average pupil. He becomes a trouble maker and the focal point of disorder. An effort should be made to begin teaching reading to groups of approximately the same learning ability.

Over-emphasis on Memorization

There is a tendency to over-emphasize memorization. The teacher in a fourth class which I visited held the book continuously between his fingers throughout the entire day. In several subjects he asked pupil after pupil to answer the same question. Each child answered in the exact words he had read in the text. I heard a class of 60 children recite in unison "The Butterfly's Ball", a poem which is approximately 50 lines long. This is an extreme case, yet it illustrates the importance which is attached to memorization.

The emphasis on memorization was humorously revealed in a recent interview with a high government official who, in his student days, dared to depart from the textbook. The professor called him aside and said, "You have done well in the paper. But I did not give you pass marks because you used your own independent language"*. instead of faithfully following the textbook language".

Releasing Self-Expression and Creative Impulse

Generally speaking the children have only a limited outlet for their creative ability. In most classes that I visited, the teacher asked the children to copy a drawing which he made on the chalkboard. In a fourth class in which the children were copying a fire scene, one child completely departed from the picture and drew a fire brigade spraying water on a burning house. This child demonstrated that you cannot completely suppress the creative impulse of talented children.

I observed only a few cases of original writing in the language classes. The teachers emphasized the mastery of skills and memorization of facts, but completely neglected to encourage free and creative self-expression. Poetry is read and recited but the children are never called upon to compose original verse. In order to develop the latent talents of boys and girls to their fullest capacity, the teacher should provide as many outlets as possible for self-expression.

Friendly Attitude towards Children

Many teachers tend to order the children in loud and sharp tones. For example, I heard a good teacher command the little children in class II, "Stand! one, two; Sit! one, two". There was no doubt in my mind that this particular teacher could have gotten equally good

*Quoted in "Kerala's New Chief Minister"—Illustrated Weekly of India, May 5, 1957 p 24. This statement attributed to him was confirmed by Mr. E.M.S. Namboodiripad, Chief Minister of Kerala.

response without military regiment. The sharp commanding voice has the effect of making the child docile and submissive. In my opinion, her manner can be softened without harm to the mastery of knowledge. Here as in other regimented classrooms, the teacher becomes less formal as the day progresses and the children are permitted greater freedom of movement. Generally speaking, underneath the stern exterior of the average Indian teacher, there is a kind and friendly relationship with boys and girls.

Drill in regimented response sometimes begins very early in the educational career of the child. In the nursery class of one school I heard children drilled in carrying out such orders as, "stand up" and "break the line". When a question is asked in a loud commanding voice, the children, following the example of the teacher, shout the answer in unison. This formal manner of speaking becomes habitual even when the pupil speaks individually. It probably also explains why some children shout or declaim as they read.

Referring to complaints of growing indiscipline among the students, Vinoba Bhave said that "this was because the teacher-pupil relationship had almost come to an end. The feeling of trust and respect of a teacher and kindness and affection for a student was hardly seen these days."

I visited a first class in which there was more freedom than in any I had seen before. Yet the children were as orderly and as responsive as in any first class under the strictest discipline. In this free and informal atmosphere, the children were more attentive than in the formal class. In another school the teacher spoke softly. She never raised her voice. She got a good response without being obtrusive or without dominating the children. The teacher was exceptionally kind, considerate and respectful towards the children. The children probably loved her. The children were happy and eager to participate. This was the most mutually affectionate and responsive atmosphere that I had yet encountered.

The non-believers in freedom and informality should visit this class. The sceptics need this experience to be converted. If I had responsibility for instructional guidance, I would spend a day with groups of teachers in this room and in others like it. I am convinced that the speech as well as the manner of the average teacher can become more gentle and kind.

Discipline is inseparable from the Curriculum

Many teachers and principals charge that there is a general condition of indiscipline. In my many visits to schools and classes, I have never encountered any serious disorder among the pupils. On the contrary, in spite of the regimentation of the teaching process in certain classrooms, I found a good teacher-pupil relationship. Indiscipline implies that there is something wicked in the very nature of the young person. This is contrary to fact. Assuming for the sake of argument that there is some truth in this assertion, it should be remembered that discipline is inseparable from the curriculum. What is difficult and uninteresting creates idleness, which in turn, results in disorder, resentment and rebellion.

The children should be given greater responsibility. As the Hindi lesson was about to begin in a reputedly good school, the teacher passed on erasers and pencils while the pupils sat still. This could have been done just as well by the children. The importance of giving the children all the responsibility which they can carry is not sufficiently appreciated. To a western observer, the reluctance to make the children more self-reliant is a vestige of an authoritarian tradition.

The teacher should make a more positive approach. Almost everywhere the children carefully conceal their written work from their neighbours. This is a by-product of a negative approach that I have seen in a variety of other ways. In this instance, it was certainly not necessary for the children to guard their written work so closely since each child was about two feet from his neighbour. I infer, therefore, that the practice had become habitual and automatic. As these same children walk back to the class from games, they hold their fingers to their lips and keep them there as they wait for the others to arrive. I doubt whether the teacher realises the effect of this requirement on the observer. To me it seemed as if every child wore a badge reading "I must not talk." The teachers must learn to trust the children. It would be wiser to encourage honesty and self-reliance and then to deal individually with the violators.

The needs for the improvement of learning in schools that I have observed may be summarized as follows: there is a need for active, lifelike, varied and creative learning; learning is not adjusted to individual differences; there is a need for more expression of the creative impulse of the child; the teachers emphasize the mastery of skills and the memorization of facts but neglect original writing.

There is a need to teach the children in a more friendly and informal manner. The children should be given greater responsibility. The importance of giving the children all the responsibility which they can carry is not sufficiently appreciated. The teachers must learn to trust the children.

Suggestions for the improvement of learning may be summarized as follows:

1. Learning is most effective when an individual is challenged by a difficulty, a need, or goal or when he comes to grips with a real problem.
2. Learning goes on most effectively when an individual is at home in a situation; when he knows where he is going; when he knows what it is all about.
3. A fragment or part is more easily understood and learnt in relation to the whole of which it is a part.
4. Learning that is lifelike will be remembered longer and have greatest usefulness.
5. The learner should have opportunities for self-expression in order to bring out his latent talents.
6. Learning, like natural behaviour, involves the expression of all the senses, construction, play, and companionship.

7. Learning is more than reciting, reading and drilling; it includes many activities—planning, discussing, constructing, decorating, painting, gardening, etc.
8. Learning goes on most effectively when the individual enjoys what he is doing, or when he is so absorbed in the activity as to be unaware of its ordinary monotony.
9. In a democracy, the individual should have abundant opportunity to originate, plan, and direct an activity within the limits of his maturity.

The Basic Learning Unit

I have seen references to projects, activities or units of work in the Indian educational literature and syllabi, but I have not had the good fortune to see this type of purposeful learning in any of the classrooms I have visited.* This is not surprising to me because I have not encountered too many examples of units of work in my extensive travels in the United States where the *unit of work* has been generally accepted by educationists for over three decades.

The educational climate in India today is particularly favourable to experimentation with a Basic learning unit which is purposeful and has coherence. The traditional schools have accepted the principle of integration of history, geography and civics, and the Basic schools are committed to the doctrine of correlation with the social and natural environment. For example, I quote from the syllabi for standard IX published by the government of Kerala in 1956. "The social studies course is broken up into a series of correlated units of study, each offering endless opportunities for active learning and cooperative study, always relating the lesson to contemporary events."

The Report of the Assessment Committee on Basic Education published in 1956 states that an essential characteristic of Basic education is "the correlated method of teaching, with correlation not restricted to productive work only but also extending to the natural environment and the social environment." The Punjab syllabus for Junior Basic, Primary and Middle departments of recognised schools contains suggested activities for Primary classes. Two periods are allotted each day to what is called *The Activity Hour*. The activities revolve around a centre of interest or project which the pupils choose and plan. The centres of interest for the successive Primary classes are: 1. Home and Family; 2. Our Homes and Our Neighbourhood; 3. Our Clothing; and 4. Our Food.

Handwork and study are assigned to different small groups. The class evaluates its work from time to time and plans further work. Several activities are suggested for each class and each teacher is advised to choose what is best suited to the children's needs. In addition to the time allotted to activities, the Punjab teacher is expected to apply the suggested correlation to the teaching of several subjects. For example, a problem in measurement arising in activity may be taken up during the period devoted to arithmetic.

*Activities for Primary School. Detailed Syllabi for Junior Basic, Primary and Middle departments in the Punjab, 1950, pages 14—24. For each class four activities or projects are suggested. Activity-Centred Curriculum for Elementary Schools. Field Extension Service, Teachers Training College, Srinagar.

The activities for the Primary school are actually social studies. Nevertheless, social studies appears as a separate subject. In my opinion, the fusion of activities and social studies into a single block which might be called *social living* would eliminate overlapping and give the teacher wider scope for correlation with all subjects.

Fundamentally what is needed is a re-examination of the framework of the total curriculum, a problem which is discussed elsewhere in this monograph. For the present, I shall take the liberty of presenting my concession of a unit of work. The word *project*, first introduced by William N. Kilpatrick forty years ago, connotes the Basic learning unit more accurately than any other word. However, such terms as *project*, *problem*, *activity*, *enterprise*, and *unit of work* are used interchangeably, but I favour the latter because it is the most commonly accepted term in current usage.

Major Characteristics of a Unit of Work

A unit of work is a large on-going experience in which the learners work together to reach a goal which they have accepted as their own. The unit of work begins with a goal and ends when the goal is reached. For convenience, I present the following major characteristics of the unit of work:

1. It is a purposeful learning enterprise in which the pupils work together to solve a problem of individual or community living.
2. The pupils have a part in deciding what their learning enterprise shall be. They help to outline the inquiry and, therefore, step by step, they know where they are going.
3. The unit is a continuing and developing project, which day by day, goes more deeply into the problem, set by the pupils themselves.
4. The learning activities are varied and lifelike including construction, research, field trips, experimentation, creative activities, and so on.
5. At every point the pupils are motivated by the need to find answers to their own questions; solutions to their own problems.
6. Every activity is an integral part of a whole pupil-directed enterprise in which each pupil contributes his share to the common goal of the group.
7. The unit unfolds like a story. Each day there are unexpected developments which lead to new activities.
8. The pupils work together in small groups to pool their experiences, their information and their opinions.
9. The pupils come together from time to time to share what they have done.
10. The pupils have a part continuously in appraising the process and product of their learning activities.

The unit of work cannot be introduced abruptly by a directive or any other administrative device. The inclusion of units of work or activities in a syllabus is no assurance that they will be taught. Before embarking upon a full scale campaign to introduce units of work, the teachers should be led through a period of preparation

including study, discussion, demonstrations, conferences, observation of actual teaching and other means of guidance and educational leadership. Unless the Indian teachers are more susceptible to change than my American fellow teachers, it may take a long time before the unit of work becomes a relative in the classroom. The transition from the lesson to the unit of work is a gradual process challenging the patience and devotion of teachers and headmasters.

The Learning Environment in Indian Schools

The physical environment for learning in Indian schools varies from tents to well equipped buildings and grounds. The rapid growth of schools has made it necessary to improvise all sorts of conditions for housing the hundreds of children who are eager to come to schools. When the pupils sit in tents in a peaceful rural setting it is refreshing to feel the soft breeze. However, aside from the lack of educational equipment and supplies, the tents have the disadvantage of the heat in summer, the dampness in the rainy season, and the cold of the winter months.

In the average school building the rooms are usually bare. In one building all the classes were held on the verandahs. Another school was housed in a rented building which was formerly a hotel. The exterior of the building was lined with stalls and was indistinguishable from any other commercial building in the bazaar. The rooms on two floors opening on a court were bare. There was no playground or any other space for outdoor activities.

In a government model school patterned after the public schools which are usually better housed and equipped, the rooms have stone floors and high ceilings. The building is a remnant of an old castle. The rooms have been partitioned but the pointed arches are still visible. The lighting is fair but not in every part of the room.

The seating arrangements vary from school to school. A great many children sit on mats and have no desks. The principal in one of the schools said that he preferred low desks but funds with which to buy them were not available.

The next variety of seating is the low bench approximately ten inches high, used with slanting desks. The effect on the health, posture, efficiency and ease of writing of the children is probably not entirely satisfactory. The over-sized pupils are cramped and positively uncomfortable.

I visited several schools in which the pupils were seated on benches with attached board-like desks in front of them. The benches and desks were too narrow for work or comfort.

In the better schools the room is equipped with individual tables and chairs. I am inclined to favour individual tables and chairs because they can be moved about with the greatest ease. They give the needed mobility for the varying activities that make up the child's group life. For listening or for reading the black-board, the children can face in one direction. For sharing, the furniture can easily be converted into a large circle or a square. For group work, the tables can be combined into clusters seating two, four, six or eight children. For play and dramatics, the furniture can be compressed into the smallest space at one end of the room.

With very few exceptions, the arrangement of the children is in fixed rows facing the teacher. I visited a class in which an enterprising teacher had divided his class in social studies into two groups. But the students in each group did not sit face to face, that is, they all faced in one direction. I suggested shifting of the chairs in order to permit the students to see each other. Although the teacher said that it was difficult to move the furniture and was a waste of time, he permitted me to ask the pupils to form a little circle. The actual timing showed that it took 10 seconds to make the change.

I visited only two classrooms in which the furniture was moved. In a first class the children were sitting in a hollow square. Later in the day they sat behind their little desks. In the other classroom I was delighted to see the furniture stacked along the wall for dancing and, later in the day, for art.

Every one of the hundreds of rooms that I visited was white-washed and bare of decorations. Usually the equipment was limited to a black-board mounted on a large easel and a teacher's desk or table. In some of the Basic schools, the craft materials were stored in a large metal box. Painted charts were commonly found but pictures drawn by the children or reproductions of the works of art were rarely seen. I rarely saw growing things, pieces of pottery or brass or any other bits of decorative touches. The appearance of rooms did not seem to be consistent with the Indian love of colour and beauty. The addition of touches of colour and the beautification of the learner's surroundings are basic needs.

The construction of building and the equipment for classrooms will have to come gradually with the improvement of economic conditions. In the meantime, there is no reason for not making a beginning with the beautification of rooms. The school building is the child's home for a large part of his waking time each day. The beautification of the rooms can be a stimulating and educative project for children in every classroom.

Summary and Recommendations

1. The curriculum planners should begin with an analysis of living. They should know how the people live, how they govern themselves, how they earn a living, how they play, and so forth.
2. The curriculum should be adapted to those aspects of daily living which have been influenced by social, political and economic changes of our time.
3. Each school system, and for that matter, each individual school should undertake to determine its broad aims and guiding principles. Only as the teachers share in discussion is their thinking reconstructed.
4. In the early stages of the preparation of syllabi, the working group should sketch the total curriculum in broad outline.
5. The subject matter should consist of the information and skills which help the students to solve their problems or to achieve their goals.

6. To counteract the tendency to fractionize knowledge into many subjects, the schools should continue to experiment with the fusion of related subjects into broad areas.

7. The teacher should begin to adjust learning to individual differences. A special effort should be made to teach reading to small groups of approximately the same learning ability.

8. In order to develop the latent abilities of boys and girls to their fullest capacity, the teachers should provide as many opportunities as possible for self-expression.

9. The children should be made more self-reliant. They should be given all the responsibility they can carry.

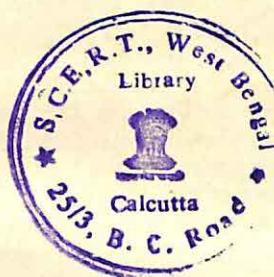
10. The teacher should recognize that learning is more than reciting, reading and drilling. Learning includes many activities such as planning, discussing, constructing, decorating, and the like.

11. The pupils should be given abundant opportunities to originate, plan, and direct an activity within the limits of their maturity.

12. The educational climate in India today is conducive to experimentation with a Basic learning unit in which the pupils work together to solve problems of individual or community living.

13. The children should assume greater responsibility for the beautification of their classrooms.

14. As furniture becomes available, it should consist of individual tables and chairs because they can be moved about with the greatest ease. They give the needed mobility for the varied classroom activities.



CHAPTER III

ELEMENTARY SCHOOL CURRICULUM

It is the function of this chapter to make an informal appraisal of the Elementary school curriculum (in whole and in parts) and to indicate where improvement can be made. While the Elementary school is usually divided into a Primary and a Middle school department, it is here considered as one continuous unit including classes I-VIII. Incidentally, this is the trend in several States. After taking an overall view of the total curriculum, one subject after another will be examined.

A Balanced Elementary School Curriculum

In chapter two, I sketched the total curriculum in broad outline. It was suggested, furthermore, that balance in the total life of the school is achieved through the relative emphasis given to the five basic ingredients of social living, daily routine activities, expressive arts, basic skills, and individual interests. (See chart on page 15). In the light of this framework, I analysed the time-tables of most of the schools which I visited and have arrived at these conclusions:

1. Very little time is devoted to current social living. Greater attention should be given to the problems of community living.
2. Art, craft, and music are commonly neglected. More emphasis should be placed on the creative and expressive arts. Music should not only be given greater attention but it should also become an inseparable part of the total life of the children each day.
3. Practically no time is devoted to the individual interests of children. An increasing amount of time should be devoted to special interests during a free period.
4. The pupils are not given enough time for games and physical recreation. More time should be devoted to games and other forms of outdoor play.
5. Very few teachers have set aside a short period for rest. The noon meal should be followed by complete relaxation during a quiet period or by listening to a story.

From the point of view of a balanced distribution of subjects of the curriculum, science and health have a subordinate place. Where drawing is taught it should be broadened to include crafts and hand-work. Language is given a disproportionately greater emphasis but this is unavoidable. Dramatics and dance are not given enough emphasis. A period for recreational reading is rarely provided.

To make these comments clear, a few time-tables are examined in detail. In one Primary school approximately three hours and ten minutes are devoted to class work each day. The subjects and the number of periods per week are as follows: arithmetic, 9; mother tongue, 9; social studies, 6; everyday science (hygiene and nature

study), 4; and practical arts (handwork, sewing and singing), 5. An overview of the life of this Primary school shows that insufficient emphasis is given to social living, the expressive arts and individual or free activities. However, the curriculum is not too much out of balance.

In the Middle school the subjects and the number of periods each week are as follows: mathematics, 8 periods; mother tongue, 6; English, 8; social studies, 6; everyday science, 2; practical activities, 4; and Sanskrit, 2. An examination of this programme of studies shows an insufficient emphasis upon social living, expressive arts, science, and games.

The Secondary Education Commission suggested a fairly well balanced design for the Middle school curriculum, consisting of languages, social studies, mathematics, art, music, craft, and physical education. This suggested curriculum should also have included home life, health, and individual interests.

General School Policies

Before proceeding to review the subjects of the Elementary school curriculum it is necessary to consider a few general school policies such as a good standard of class enrolment; the basis of promotion from class to class; and the nature of progress reports. At this point it is also appropriate to consider the place of the library in the organisation of the school.

The Problem of Large Classes

The large class is a mixed blessing. On the one hand, it provides a seat for each child and on the other it makes teaching and learning a difficult process. I visited a school building in Madras which was built in 1926 for 150 children but now it houses 764 children who sit in halls separated by improvised partitions, on stairway landings, and any other recesses into which they can be crowded. The great awakening of the masses which came with independence continues unabated. The papers in Delhi reported that several women staged a hunger strike in the office of a principal who refused admission to their children.

The demand for schooling in certain sections is overwhelming. To quote an official annual report, the State is undertaking a phenomenal expansion of schools which has no parallel in the history of India. "The problem is staggering", said one headmaster. "Good pupil-teacher relationship is possible only when we have smaller classes. There is no possibility of creating good relationship with 50 pupils in periods of 30 minutes. That is a gruesome situation we are facing."

The Act establishing Primary schools in Bombay specifies that the ratio should be one teacher to 40 pupils. When the total school enrolment exceeds 200 pupils, the school is given an extra teacher. The Delhi department of education sets a maximum of 45 pupils per class. While this is a purely tentative standard, there is always the danger of giving permanent acceptance to an unmanageable burden.

It may be necessary to put up with these adverse conditions for some time but leaders should look forward to the day when the

accepted maximum enrolment for a class is thirty pupils. Over-crowded rooms are a great handicap to the teacher and the children. The pressure of so many children on the teacher creates nervous tension. Discipline is difficult to maintain and the children receive very little individual attention.

Promotion from Class to Class

There is no uniform standard of advancing children from class to class. It varies from State to State and even from school to school within a State. Some schools have a policy of promoting all pupils to the next higher grade; others do not retain more than five per cent of their children, while some schools hold back thirty per cent of their pupils, particularly in classes VI to VIII. In fact the policy varies even within the school itself. For example, the headmaster of a High school in Jaipur said that from infant to fifth class all are promoted. From class VI to VIII, 85 per cent are promoted. In the High school 85 per cent are promoted and about 75 per cent pass the external examination at the end of class X.

The pass mark by which promotion to the next class is determined never exceeds 33 per cent. While advancement from class to class should not necessarily depend upon the pupils' score on examinations, it, nevertheless, suggests that the teacher accepts a very low standard of mastery of the facts and skills to be learnt. It was pointed out in Chapter II that one-third learning is not real learning. Regardless of the final examination, the mastery of the essentials should be continuously checked. The teacher should not proceed to a more difficult process until the preparatory knowledge and skills are learnt. Otherwise, the number of backward pupils keeps piling up from class to class and teaching becomes progressively more difficult.

In one State promotion is determined by rules framed by the Director of Education which specify that approximately 30 per cent of the pupils should be retained in classes VI and IX. The principal of a Higher Secondary school whom I interviewed believes that the teachers should make their own rules including the day to day assessment of the progress of the children.

In the Delhi Elementary schools the annual examinations in every subject are not prepared by the regular teacher but by the teacher in the class above. Supposedly, the teacher is guided by the syllabus in framing the examination. This curtails the freedom of the teacher to depart from the syllabus and prevents him from planning a test based on his knowledge of the ground covered by the class.

A policy of uninterrupted promotion of all pupils from class to class is supported by the available evidence of those investigators who have thoroughly studied the promotion of pupils. This implies that the pupil is advanced a class each year on the assumption that he will be taught on his level of development. In general, therefore, each class is made up of children who are roughly of the same chronological age.

Every class, regardless of promotion, has its retarded children. The failure to advance these children is of little help to them in evercoming their deficiencies. As long as individuals differ in ability, there is no known remedy for abolishing backwardness in the class?

A policy of uninterrupted progress is only partially effective unless an effort is made to divide the class into slow, average, and bright groups of children for learning the basic skills of communication. The children in one school were automatically advanced from grade to grade but very little attention was given to individual differences. On the basis of my observation in the first grade the range of ability to read figures from one to sixty was very wide. In the case of reading, the problem was probably more serious. It seems to me that the bright children were not systematically challenged to do their best work. The adjustment of teaching of the individual differences remains untouched in the Indian schools. Reading at least should be taught to several groups of somewhat similar ability in the Primary classes.

Progress Report for Parents

Reports on the growth of children for the information of their parents, commonly designated as *progress reports*, usually take the form of a booklet of about twelve pages in length. Month by month the report contains entries showing the pupil's conduct, health and general habits and the marks in each subject. The record for one pupil showed that out of a maximum of 130 marks, he obtained 47 marks which was barely above the standard expected for passing and promotion to the next class.

Some of the *progress reports* are so involved as to consume more than a reasonable amount of the teacher's time. For example one school form consists of eight pages and covers a large amount of detailed information concerning the physical, social, and scholastic life of the child. This is an extreme case; nevertheless, there is plenty of room for the simplification of the *progress reports*.

In general the *progress report* appears to be more elaborate than is necessary. In my opinion, the evaluation would be done more thoroughly with a simpler instrument. The parent wants to know how his child is growing as a person; how he is progressing in school work; what talents or special abilities the child has; and what weaknesses need to be corrected. It is not enough to report marks. Numbers or letters are not nearly as informative as simple statements to supplement or even replace the percentage scores.

A number of schools have developed complete annual record cards but very few schools have cumulative records of the pupil's growth from year to year. The annual record card in one of the more progressive schools included medical history of the pupil; social, mental and physical development, personal habits; and a monthly record of the pupil's marks in all the subjects. The development of forms for records and reports are engaging the attention of educationists and should yield good material for future use.

School and Classroom Library

Most of the Elementary schools have no central libraries and very few have a classroom collection. From the point of view of progress made, the libraries may be classified into three stages. The beginning stage consists of a small collection of paper-bound booklets.

The middle stage is a larger collection under lock and key with limited circulation under the supervision of the teacher. The advanced stage is usually found in the private or aided schools and consists of a large library with open shelves containing a fair proportion of cloth-bound books. It has a large circulation and is under the supervision of a trained librarian.

The children usually go to the library once a week to read and sometimes to borrow books. The pupils do not usually meet for discussion of books they had read. There is a shortage of children's literature, but the Government of India has begun to take steps to encourage the writing, publication and distribution of such books.

In the formative period, the building up of a central library may have to follow the policy of a Primary school in Chandigarh which charges each pupil a fee of eight annas for the purchase of books. This will have a limited value since it applies only to school for children whose parents can afford to pay the fee.

I visited a Primary school in Delhi which had a rudimentary collection of about 350 books. The library consisted of a cabinet full of paper-bound booklets. Although the pupils were permitted to take books home, only 30 books were in circulation at the time of my visit. A Middle school in the same place had a central library of about a thousand books which the children were permitted to borrow for one week. The school bought library books specified by the directorate. The headmistress was not satisfied with the selection and suggested that it should be made by the teachers or heads of schools who are familiar with the children. The books in the library appeared to be unused and very few names appeared in the record book. The library was still in the early stage of development.

Teaching of Languages

The teaching of languages is one of the major functions of the Elementary school. In the Upper Elementary classes, the pupil is usually engaged in learning at least two or three languages simultaneously. For example, the average Jammu and Kashmir Elementary school pupil learns Urdu which is the medium of instruction from the first class onward. Kashmiri and Dogri, the mother tongues in Kashmir and Jammu respectively, are also taught in the first five classes. The pupil may elect Hindi in class V but English is compulsory from class VI. In classes VI—VIII the pupil must choose one classical language from Sanskrit, Arabic and Persian. In actual practice, therefore, the pupil in the Primary classes must learn at least two languages and from class VI the pupil must learn at least three languages.

The formulation of policy governing the teaching of languages is complicated by sentiment and tradition. The foreigner finds it difficult to render an opinion on this knotty problem, but on the compulsory learning of a classical language, I dare to express disapproval because the issue involved is not unlike a similar controversy in the West. The ultimate solution to the problem of language instruction will depend upon the verdict of investigators and the enlightened educational administrators in India.

My observations as well as my analysis of time-tables show that teachers devote too much time to drill on the basic skills. Some of these skills are learnt in other subjects as they are used and as they are needed. Language is an inseparable part of the whole life of the school. I do not recommend a reduction of time on the learning of basic skills; I rather propose that more time should be given to their application and less time to isolated drill. This should release some time for creative activities and expressive arts.

The Teaching of Reading

Reading is taught to the class as a whole regardless of individual differences in ability. In other words, the children are not divided into smaller groups of slow, average, and fast readers. Usually the reading of a story does not begin with a preparatory step to arouse interest. The children do not read silently to themselves. One child after another reads a sentence or paragraph until the lesson or story is completed. As the child makes a mistake or fails to recognize a word, he is helped by the teacher.

With the help of an interpreter I followed the procedure in the teaching of reading in Bhopal to a first class in Hindi. The lesson consisted of the following steps:

1. The teacher prepared the children for the lesson. She asked general questions about the rainy season.
2. The children read. As each child read, the teacher corrected his mistakes in pronunciation of difficult words.
3. The teacher asked five questions as given in the book at the end of the lesson. The teacher repeated the information contained in the story sometimes in different words but the children's answers were given verbatim as contained in the story.
4. Beginning again the teacher explained about 15 new words one after the other.
5. The teacher asked the children to make sentences using difficult words.

The teacher seemed at ease and appeared to be a person who would be willing to carry out an experiment which I had been hoping to try since I arrived four months earlier. I asked Mrs. Prashad whether she would take the same class and teach a new lesson using a different sequence of steps. She was an untrained teacher but a brave soul who was willing to try if the experiment had the approval of the principal.

The principal approved and I took about three minutes to give the suggested sequence as follows:

1. The teacher arouses an interest in the story.
2. The teacher explains a few most difficult words.
3. The children read silently, each child asking the teacher for help when he comes to a new or difficult word.
4. The children read aloud one after the other.

It should be noted that I added step 3, silent reading, and changed the sequence of her steps. Actually, the children did not read silently for they had never done so before. I heard a continuous hum as the children read softly to themselves. Some children read to their neighbours.

The experimental procedure had several limitations: about ten children had no books; the teacher had no preparation for this method of teaching reading; the children were not in the habit of reading silently; and the children were not taught in ability groups. Nevertheless, my comparison of the number of mistakes made by the children showed that the children had read as well under the new procedure as they did under the regular procedure.

The advantages of the experimental procedure were: the child grasps the story as a whole; he listens to a minimum number of mistakes; and he reads at his own rate of speed.

This experiment was by no means thorough, but it demonstrated that it would be possible to follow the experimental procedure without loss in the mastery of reading. In any event, it demonstrated that it would be relatively simple to conduct an experiment in new methods of teaching reading.

Teaching of Languages in the Upper Elementary Classes

In the Middle school classes, the study of Hindi is allotted eight periods a week which are distributed as follows: prose, two periods; poetry, one; essay, one; grammar, one; dictation, one; and rapid reading, one. During the period which I observed the poem was being paraphrased line by line. No time is allotted for story telling, conversation, and reading. Writing consists of dictation or composition of a short essay. Pupils answer teacher's questions based upon the text. The essay is first discussed in class and later it is written by the children at home.

The usual procedure in a reading period is as follows:

1. The teacher asks the children to read a lesson at home.
2. The children in turn read a paragraph at a time.
3. The children ask questions on the content and difficult words.
4. Difficult words are explained and written on the board by the teacher.
5. Children write the words in their note books.
6. At the end of the period questions are answered orally and in writing by the children.
7. The teacher goes from pupil to pupil to check for content and spelling.

Reading for Enjoyment is Neglected

Supplementary books, central and classroom libraries are practically non-existent in the Elementary schools. Some schools maintain small collections which are far from adequate to meet the children's hunger for stories. At present, reading for pleasure will have to be confined to the textbooks and the few available supplementary books.

The present concern of lay as well as professional educational leaders over the paucity of children's literature will have to be remedied not only by the production of children's story books but also by greater emphasis on the appreciation of stories in the classrooms. The achievement of the goal the long range will

depend not only upon an increase in the output of children's literature but also upon the addition of classroom and library collections of books.

Informal Discussion

Free discussion of a topic or problem was not a frequent occurrence in most language classes of the traditional schools. Nevertheless, its potential development was demonstrated in a fifth class of a good Basic school in Rajpura, Punjab. An informal discussion under the leadership of a pupil was a regularly scheduled activity once a week to evaluate the performance of the ten working groups. One after another, the pupils rose and reported their needs. For example, Mohan said: "The handles of the bucket are in need of repairs." The pupils spoke well, had complete self-confidence and freely expressed their opinions. The teacher joined in the discussion whenever he had something to contribute.

There appears to be a considerable absence of original or creative writing of prose and poetry. Some of the time now devoted to language drill should be used in helping children to express their own ideas in their own words. The language skills can be taught more effectively if the pupils are given more frequent opportunities to express themselves in speaking or in writing.

The Teaching of English

The difficulties in teaching English to Indian children are not unlike those found in the teaching of a foreign language in other countries. Many teachers have neither a satisfactory command of the language nor the necessary training in the teaching of English. To say the least, English is not completely mastered in the Middle school nor is the pupil adequately prepared for the Secondary school.

English as a Foreign Language

The teaching of English as a foreign language is begun in class VI and ends in class XI. From six to twelve periods weekly are devoted to this subject. Some headmasters, contrary to regulations, have deliberately begun to teach English in class V. It would be more desirable to begin the teaching of English in an earlier class and to adjust the time allotment to its relative importance in the total curriculum.

In my visits I found much emphasis upon translation and grammar and very little on spoken English. The words, idioms and environments in the textbook were frequently foreign to children.

According to one teacher the most important aim of teaching English is to enable the student to speak the language correctly. In spite of this, I barely heard a spoken word. There was too much emphasis on the dissection of the paragraph and the definition of words. The story ended with an exercise on conversation, but the pupils were directed to write the answers in their books. The class devoted one period a week to conversation. Although the teacher agreed that speaking is more important, the syllabus said nothing about conversation.

I visited another class which was taught by a good teacher who was well prepared. He combined his lecture with questions and made application to familiar objects, yet he followed the book closely. He used the black-board skilfully, and held the attention of the pupils. The teaching consisted of reading literary selections, four periods; composition, two periods; translation, two periods; and grammar, two periods. After considerable discussion, the teacher admitted that he was not giving enough emphasis to spoken English.

The literary selections were read by the teacher and difficult words were explained. Composition consisted of writing of approximately a dozen lines on familiar subjects. Translation consisted of writing in English what the teacher dictated in Hindi. Grammar consisted of learning grammatical rules and definitions.

In the seventh class in another school the pupils read an English story and translated it into Hindi sentence by sentence. The teacher admitted that pupils were not able to carry on a conversation. The teacher permitted me to ask a few simple questions, but I failed to get an oral response from the pupils.

I had an opportunity to be associated with an English Syllabus Committee which is developing a new approach designed to correct these deficiencies. It is proposed to study English as a foreign language and not as a mother tongue. The aim is to help the boys and girls to acquire a good grasp of simple English primarily as a tool of communication. Spoken English is the foundation upon which the skills of reading and writing are built, with the sentence as a basic unit. The vocabulary is based as far as possible upon actual situations in the life of the pupil. The learning sequence follows a series of structural points graded in the order of difficulty. A minimum use of the mother tongue is suggested. Translation as an exercise is not encouraged during the first three years. The formal learning of grammatical rules and definitions is second in importance to correct usage. It is suggested that the formal study of grammar be postponed to class IX.

The production of the syllabus was a bold adventure which was approved by the Committee in spite of the stubborn resistance of a minority of the members to the reduction of emphasis on translation and grammar.

English as the Medium of Instruction

Every State has a few schools in which English is the medium of instruction. Beginning reading is taught in several different ways. A teacher in a first class followed these steps: teach the alphabet; teach syllables such as at, fat, rat; write syllables on slates and exercise books; and dictate the syllables the next day. The teacher tells the children stories but they never read a complete story. The pupils begin to read a story in the second class.

In an aided school I observed a teacher who devoted nearly three quarters of the reading period to phonetics and word drill. During the latter part of the period, the children read aloud in unison and then one child after another read sentences. The lesson came to a close with a picture exercise, the teacher asking, "What do you see in the

first picture?" It seemed to me that the children did not read with understanding or expression. Too much time was consumed in drill and not enough in reading.

A teacher in the third class began the lesson by explaining new words. Each child then took a turn in reading what the teacher had read. "Tim has such a big lunch that he can give his chum a bit of his chop." The words and idioms did not always spring from his environment because the book was published in England for British children.

Dramatization was skilfully used by a teacher of a first class. After one child read at a time, the pupils shut their books, stood on the right side of the chair and recited what they had read. "My motor is humming" was spoken and acted out. The children then read to themselves. When they finished, each child went to the teacher and read the whole lesson. If an error was made, it was corrected by the teacher. While the individual attention was commendable it was not a productive expenditure of the teacher's time. This was the only instance in which silent reading was a regular step in learning to read. In the United States silent reading always precedes oral reading.

The method of teaching reading in United States has undergone a revolution in the last generation. Thirty years ago it was not uncommon to see a period begin with, "Mary, turn to page 30 and read aloud." This would continue until the children came to the end of the story. Today reading is taught to small groups of approximately the same level of ability and reading aloud is the very last of several preparatory steps.

The most common process I have observed in many American classrooms begins with a period of preparation in which the purpose for reading a particular story is established and interest is aroused. Perhaps a few questions are asked to give the children a background of familiarity with the content of the new story. When the children are ready each pupil reads silently. As the child meets a new word he asks the teacher's help. Sometimes this is followed briefly by drill on a few of the most difficult words. A few more questions are asked to bring out answers found in the story. The preceding steps develop understanding, confidence, and fluency. Finally, when all the children are ready, one child after another reads aloud with understanding and expression.

Mathematics

On the whole, mathematics was well taught in the Elementary schools. Generally speaking the teachers were well prepared and the instruction was thorough. The explanations were clear, systematic and neatly arranged on the black-board. While the textbook was the basis of instruction, the problems were usually based on life situations. The steps followed in most class periods which I observed may be summarized as follows:

1. A problem is given. It is given orally; written on the black-board; or taken from the textbook.
2. The steps in solving the problem are analysed by the pupils with the help of the teacher.

3. Questions are asked to test the pupil's understanding of the steps.

4. The pupils proceed to solve several problems.

5. As each problem is being solved the teacher goes from pupil to pupil to check for correctness.

In the lower classes I frequently saw the teacher go from pupil to pupil to check for correctness of answers while a large part of the whole class had nothing to do. This was followed by a clear and thorough explanation which unfortunately was completely wasted on most of the pupils who had already got the right answer.

In two adjoining rooms there was a complete contrast in the teacher's way of keeping of the whole class busy during the correction of problems. In class V, the children sat and waited. In class VIII, the teacher read a problem for those who had finished while she continued to correct the papers. The emphasis which the average Indian teacher puts on the correction of the children's work is commendable but it should be accomplished with less waste of time and idleness.

If a small group fails to get the correct answer, the teacher should explain the whole process to them a second time while the rest of the class remains busy with unfinished problems. The teacher should assign enough problems to keep the bright pupils busy during the whole class period. Pupils should be expected to keep working one problem after another while the teacher goes from pupil to pupil.

At the end of a problem, I have seen a number of teachers repeat the explanation for the benefit of only a small fraction of the class. This is a waste of time. The common mistakes should be discussed with the whole class, while the infrequent errors can be explained to individuals or small groups.

The teacher tends to adhere to the textbook too closely. He should feel free to supplement the problems in the book by situations in the daily life of the children, in home, school and the community. He should apply the facts and processes to the situations in the environment of the child. The teacher should carefully check the accuracy of the statements in the textbook such as the distance between places, the price of goods, and so on.

Most of the pupils in class VII and VIII are not mature enough to master square root, geometry and algebra. At this stage, the children are 12 or 13 years old. The teaching of these mathematical processes would be far more effective in the Secondary classes when the pupils are ready for them. The syllabus committee with which I worked, although its members were generally liberal minded, included a considerable number of processes which are too advanced for Elementary pupils.

Social Studies

The social studies afford the school an exceptional opportunity to fulfil its social responsibility. This was discussed in a section of Chapter II in which I pointed out the need of education for democratic citizenship; that social changes make special demands on the

modern school; and that the curriculum must be related to community life. References were made to syllabi which give special attention to current problems of living in the village, town, and city.

The aim of the social studies is to help children to get along with the people. The simplest social activities are those which bring children into contact with persons or groups in school and community. The indirect contact involves the child's relation to his government, to other social and economic groups, and to other nations.

A simple and workable sequence of social studies in the Elementary classes is based on the expansion of the child's horizon. In the first class, the pupil begins with the home and in subsequent classes he continues to study the community, the state, the nation, and ultimately the world.

Fusion of the Social Studies

Most school systems have adopted the policy of fusing history, geography, and civics into the single subject of social studies. The integration is more nominal than real in most of the schools that I visited. The textbook in social studies actually consists of three separate and dissociated subjects of history, geography, and civics. One Middle school teacher remarked "The fusion of the subjects will be accomplished only if they are fused in the textbook."

The social studies appeared to be in the formative stage particularly in schools in which English is the medium of instruction. The pupils had no text, the content had not yet been developed in detail and the procedure was very largely improvised. Judging by the fragments of mimeographed material prepared for the children there was no evidence that social studies had been fused.

In a number of instances the fusion of history, geography, and civics was opposed on the ground that it did not give enough importance to the study of history. It was felt that history should be studied in greater detail. Formerly, Madras fused the social studies in classes VI to XI. The revised syllabus will restrict the consolidated social studies course to classes VI-VII and beginning with class VIII, history, geography and civics will be studied separately.

Teaching Procedures observed in Classes

The time allotted to the social studies varies from State to State and from school to school. In general the social studies are not given sufficient emphasis. I visited one school in which three periods are allotted to this subject compared with eight periods in a nearby school. In the former school, music is also assigned three periods. Does this mean that music and social studies are equally important?

The teaching procedure in most classes was largely of the reading-recitation-discussion type. When a text book was not available, the teacher lectured to the class.

I visited a Middle school in which the teacher had told the story of Shivaji, which the children were reading. In the next period she asked questions, the answers to which were given in a word or in a sentence.

The headmistress of one school suggested the following improvements in the syllabus: "Social studies should be made more practical and interesting; it is now bookish and has no continuity. For example, the outline in history begins with the stone age, is followed by the iron age and then jumps to cotton and silk. The outlines are sketchy, brief and inadequate."

Current Vital Social Problems

The social education of the children and youth should be directed toward the rehabilitation of village life. The need for improvement of economic conditions imposes upon the schools the task of developing enlightened leadership and public-spirited service. The improvement of rural life will depend upon an increase of the village worker's income and his opportunities for employment. The schools will have to create a pool of educated leaders from which to choose those who are capable of helping the people to plan and carry out their own social projects.

The success of the community development programmes will depend upon the training of its leaders. The school can help the village as well as the block plans to succeed by training for leadership through pupil participation in accordance with their maturity.

The schools of India are to be congratulated for the policy of expecting the pupils to render community service. The kind of service rendered ranged from improvement of school grounds to helping in the construction of roads in a community development area.

"The school is an epitome of society, and in fact each class is a miniature society. The recognition of the school as a community thus offers the most suitable atmosphere for training in citizenship."* In these words, Humayun Kabir implies that every school and every class are little democracies. Many schools have organised their classes and their schools on a self-governing basis. A Middle school in Jaipur was organized on the parliamentary pattern with two representatives from each class. Generally speaking, the Basic schools have advanced further than the traditional schools in the art of self-government.

Social Studies offer an Excellent Opportunity for Projects

In Chapter II several instances were cited of an attempt to introduce purposeful projects or units of work. For example, it was shown that while the Punjab syllabus provided an *activity hour* during which social enterprises such as *Our Homes* could be introduced, only two periods per week were allotted to social studies. Social studies as a subject offers an excellent opportunity for the gradual introduction of projects. Given a double period, daily, the teacher would have enough latitude to direct a purposeful learning enterprise in which the pupils work together to solve a problem of community living. The introduction of purposeful learning is a slow process and is dependent upon supervisory guidance and patient experimentation. This explains why I could not find projects or units of work in several schools in two States in which this policy had official approval.

*Kabir, Humayun, "Education in New India", George Allen and Unwin Ltd., London, 1956, p. 23.

Science

The Primary schools which I visited never devote more than three periods a week to science and the Middle schools devote little more time. This allotment of time is a small fraction of the 44 periods a week commonly devoted to all subjects. In theory, the Basic schools attach more importance to the natural environment, but in practice less time is spent on science than in the traditional schools. In the schools of two States which I visited, the study of science is begun at the Middle school stage and is completely neglected in the Primary school. In view of the current emphasis upon the technological advancement in India, science should be given greater emphasis in all the Primary and Middle school classes. In a recent article, an investigator reported that "while there have been no sweeping changes in the Indian village, there is hardly a village which has not been touched, in one way or another, by the scientific, industrial, technological and political developments of the day."

The teaching of science in the Primary school classes is usually bookish, but I have also seen some good teaching in the better schools. In one urban school, I was agreeably surprised to see the little children in the first class put on their shoes and go to a large screened cage in the school yard, in which rabbits were kept on one side and chickens on the other. The children took turns feeding the animals.

In another school I saw three different approaches to the teaching of science. The teacher in class III described his procedure in the teaching of science as follows: "I read the lesson on the Bowl of Goldfish; then I ask them questions." This procedure, therefore, is indistinguishable from reading lessons.

In class IV it was a relief to see the lesson on the parts of flower begin with an actual flower brought to the class by one of the pupils. Taking the flower pieces and walking up and down the aisle, the teacher showed the children the stalk, calyx, the sepals and the petals. Each time she asked: "What do you call this?" She then drew a large drawing of the flower on the board which was seen by every child and labelled these parts again. The teacher knew her subject and did not depend on the textbook although she had asked the children to open their books and turn to the chapter on the "Parts of a Flower".

In class VI, the little scientists dressed in white and looking like laboratory technicians were making a saturated salt solution. This study of the method of separation of a solution was followed by oral review.

Many teachers of science are not sufficiently trained to give them the confidence and ability to teach the subject satisfactorily. The subject matter covered in the syllabus is too ambitious. During the period of readjustment through which most of the States are going, it will be wiser to postpone the more difficult and theoretical facts and principles to the Secondary stage. Such topics as the nervous system, air pressure, the principle of Archimedes and chemical elements and compounds can wait until the children are more mature.

The Delhi Syllabus Committee in Science with which I had the good fortune to be associated prepared a good guide for the improvement of teaching of this subject. After determining the general aims, the following broad areas of science were identified: animal life, plant life, non-living things, heavenly bodies, health and hygiene, weather and climate, air and water, agriculture, and lastly energy and matter.

Each broad area was subdivided into specific topics which were arranged in the order of difficulty from class I to class VIII. For example, the study of *non-living things* progresses from the simple objects in the home to rocks, soils, land forms, minerals, common metals, and concludes with the study of petroleum.

For each topic or unit, the teacher was given the specific objectives, the informational content, the teaching suggestions and the needed equipment. The syllabus suggested the use of a science table for display of the objects which the pupils bring to school. It recommended that learning should be based on day-to-day observations of the children and simple experiments. Recognizing the difference in the surroundings and facilities of rural and urban schools, the teacher was advised to adjust teaching to the available resources. The Committee advised the teacher to improvise the equipment or to resort to simple apparatus in the absence of a fully equipped laboratory.

The teacher was reminded that many objects needed for first-hand study are available in the natural environment of the school. These include rocks, soils, seeds, flowers, fruits, vegetables, metals and so on. Such equipment as pots, tins, jars and tumblers could be brought from the homes of the children.

Simple experiments were suggested for every class. For example, to demonstrate active and inactive air, the syllabus suggested that a candle may be lighted in a pan to which water is added. As a bottle or jar is placed over the candle, the children observe the changes and draw their conclusions. Another suggested example was the use of a tyre pump to show that it is a form of compression pump. The well-to-do schools were urged to accumulate such equipment as magnifying glasses, thermometer, physical balance, microscope, the aquarium, and so on. Such schools were urged to avail themselves of the opportunities of borrowing films, filmstrips, and models. And lastly, the teacher was advised to make a collection of pictures, charts and inexpensive supplementary pamphlets.

Expressive Arts

Although the expressive arts are generally neglected in the Elementary schools of India, given a little encouragement, the flowering of the arts is bound to come. I have seen enough of the rudiments to be persuaded that artistic expression is a native Indian endowment which cannot be denied.

In the Elementary school, the arts suffer from the imitative and routinized influence which dominates the teaching of factual knowledge in other subjects. In many classes work in art consists of copying what the teacher draws on the black-board. I saw the children in a second class copy a butterfly which was too complex in detail

for free expression. The obvious need was for more creative, free bold strokes with crayon or brush. On the other hand, I saw children in Chandigarh who were painting without restraint. I stopped before a painting of a figure in front of a house with trees in the background. In reply to my question, the child said: "The girl is looking after the garden." The teacher told me that the children also work with papier mache, cardboard, crepe paper and cloth. I saw an old shuttlecock made into a pretty doll.

In its highest form art is a means of creative expression which serves as an outlet for the finer emotions. It is involved in everything we do which expresses beauty in thought, feeling or action. In the changing curriculum the arts should be learnt as the impulse for emotional expression arises in all the learning activities. The arts involve scores of particular media of expression, the need for which springs up in the most unexpected ways.

Handicrafts

The handicrafts are slowly working their way into the curriculum although glaring omissions still exist. In Kashmir, which is famous for its crafts, I was surprised to find that handwork is neglected, although drawing is taught.

The influence of the craft-centred approach to Basic education has led to the introduction of handicrafts into the traditional schools. For example, the time-table of an Elementary school in Madras allots one period a day to handicraft. Clay modelling and paper cutting are taught in classes I and II and spinning is taught in classes III—V.

The syllabus committee of the Delhi Department of Education recently decided to add handwork to the subjects of Elementary schools, in order to bring the traditional schools in line with Basic schools. The syllabus committee agreed to include clay modelling, plaster of paris, wood work, gardening, book-binding and other practical activities.

Vocal and Instrumental Music

Where music was taught it was a joy to hear the children sing and play. Music should not only be given greater emphasis, but also should become an inseparable part of the total life of the children each day. Singing should spring from the heart of the group. In the course of the day, the children have many occasions to express their feelings in the richness of Indian music.

In Howrah, West Bengal, the children in a third class clustered around the teacher who sang to the accompaniment of a harmonium. The children sang after the teacher. The melody was tuneful but the voices in imitation of the teacher were loud and rasping. In the fifth class of the same school, I heard a vigorous and inspiring work song. "Let us work with spade. Shake off some of our false dignity. This work will make us strong and vigorous." The children formed a circle and dramatized the words as they sang.

In Madras, I saw graceful rhythmic stamping and bending of a group of dancing girls. In perfect unison they sang as they danced. "Our country depends on the plough. Let us praise those who work on the land and fill the air with music everywhere. Let us work together in cultivating the barren land." However, the boys went out for games. They did not sing or dance.

Dance

Dance is closely allied to music. In Chandigarh, I saw the children dancing to the tune of a song on a gramophone, the theme of which was 'going to the river'. The children expressed the ideas in pantomime. "They have a bath, comb their hair, decorate themselves, pick flowers, make a garland, pick up a vessel and go home."

In Howrah, I saw the children form a circle, hold hands, move to the centre and out again. "We are the Children of Bengal" was sung to the accompaniment of movements of the hands and body.

In Srinagar, I saw a small improvised orchestra of ten boys clustered around the teacher who was playing a harmonium. One child was playing a *santoor*, an instrument of Persian origin and the others played a *khartal*, a *dholki* and a *talhoru*. As they played, they sang a fast, lilting, rhythmic, dance-like tune. "Why don't the children dance?", I asked. As a concession to me one boy who had learned the dance stepped out and gracefully swayed to the rhythm of the melody. On my request the boy sang as he danced. The rhythm grew faster and faster. On my urging, the teacher reluctantly began to teach the boys to dance. Soon all the children swung quickly into graceful motion. The dance should naturally accompany the music, instead of being only a response to the whim of the observer.

Physical Training

Physical training and games do not receive the emphasis commensurate with their importance in the life of boys and girls. The activities vary from military drill and rigid calisthenic exercises to informal games and graceful dances. Generally speaking, too much emphasis is placed upon formal exercises. For example, the children in a fourth class in Delhi marched outdoors and ran clear around the large playground. They then formed straight rows and practised running at their places. After an extensive series of calisthenic exercises, a short period was devoted to games. I saw a class of girls in Chandigarh spend a whole period doing exercises with dumb-bells.

The routine of activities usually contained in the syllabus gives the greatest attention to exercises such as running, hopping, skipping, arm movements, body movements, and other isolated physical exercises. These exercises should have a subordinate place. The enrichment of the recreational life in the towns and villages will depend upon the development of an extensive collection of active games and dances. Furthermore, the same skills that are stressed in exercises can be developed through games with the additional advantage of good sportsmanship and team play.

In contrast with regimented exercises in response to sharp commands, I saw many informal activities, particularly among the girls. The pupils formed a circle and played games. A class of little children went outdoors, ran, jumped, imitated a butterfly and played other mimetic games.

In some schools, physical training did not have the status of a regular school subject. It was completely neglected or crowded into the co-curricular programme. Games and physical activities are basic in the recreational life of the child and they also contribute to normal physical growth. The best results are obtained through participation in joyful group activities which may easily be woven into the social life of a community.

Closely related to outdoor play is the need for rest. I visited very few schools in which I saw children resting. In one school, at the end of the day, the children were lying on their stomachs. Some were actually asleep and one was snoring. I wondered why the teacher waited until the end of the day for rest. The children were quite ready for rest after the noon meal.

Summary and Recommendations

1. The Elementary school should devote more time to problems of community living. It should put more emphasis on the expressive arts and outdoor play.
2. Although it may be necessary to put up with large classes for some time, the educational leaders should look forward to the day when the accepted maximum enrolment in a class is thirty pupils.
3. The teachers should gradually raise the standard of mastery of facts and skills to be learnt by the children.
4. The teaching of reading should be given special attention by the inspectors, headmasters and Training colleges. In teaching reading to Primary school children, the class should be divided into several small groups of somewhat similar ability.
5. The present emphasis on children's literature should be implemented by greater emphasis on the appreciation of stories in the classroom.
6. Some of the time now devoted to language drill should be used in giving the children more opportunities to express themselves in speaking and writing.
7. The teaching of English should give greater emphasis to speaking the language correctly. The structural approach introduced in several States should be taught more widely. According to this method, the skills of reading and writing are built on a foundation of spoken English.
8. The emphasis which the average teacher puts on the correction of the children's work is commendable, but it should be accomplished with less waste of time and idleness of pupils.
9. The teacher should feel free to supplement the problems in the arithmetic textbook by situations in the daily life of the children.

10. The standard of attainment in arithmetic should be adjusted to the children's learning ability in order to ensure greater mastery of the fundamental processes.

11. The fusion of history, geography and civics into a single subject of social studies should become not only nominal but real.

12. Social studies as a subject offers an excellent opportunity for the gradual introduction of projects based upon current social living.

13. The more difficult and theoretical facts and principles in science should be postponed to the Secondary stage.

14. In the changing curriculum, the expressive arts should be taught at suitable times as the need for emotional expression arises.

15. The pupils should learn active games and dances for the enrichment of the recreational life in the towns and villages.

CHAPTER IV

BASIC EDUCATION

The idea of Basic education was conceived by Mahatma Gandhi, and was developed by his devoted disciples. It was a reaction to a system of education imposed by an alien State for the purpose of training clerks to administer its governmental affairs. It came into being in the wake of the national movement dedicated to the liberation of India.

To revive village economic life, Mahatma Gandhi maintained that education should be based on village occupations. The individual, he maintained, should become self-sufficient through skill in spinning, weaving, farming or other crafts. He held the view that the education of the child should begin with *takli* and that his schooling should be imparted through the handicraft. He assumed that the income from the sale products would be enough to pay the teachers' salary. In teaching the children he preferred the spoken over the printed word.

Basic education is devoted to the ideals of democracy and to the advancement of the common good. It is unhampered by outworn traditions, vested interests, and empty forms. The Basic school stresses community living, social service, self-government, and economic self-sufficiency. The pupils live in an atmosphere of freedom, flexibility and informality.

There is much to be said in praise of the noble aspirations of the founders of the Basic school. However, in my opinion, the Basic school needs to make a number of major changes in principle and practice if it is to speed up the attainment of its primary goal of improvement of living. Basic education should be an idea which is in a continuous state of becoming. It should be adjusted to the changing conditions of the time. In the words of Dr. K. L. Shrimali, who wrote the introduction to the "Handbook for Teachers of Basic Schools" published by the Ministry of Education in 1956, "Education cannot remain a living force if it does not keep pace with the changes and developments that take place in the social organisation and economic life of the people."

While Basic education falls almost wholly within the category of Elementary education, it is treated separately because it has a distinctive character of its own. It is not my intention to make an exhaustive study of Basic education but it has so much in common with the aspirations of liberal educators that I cannot resist the temptation of making a brief appraisal of its principles and practices and to speculate on its potential development.

My impressions are based upon visits to twelve Basic schools in nine widely distributed, representative States and upon conferences with headmasters and teachers.

Basic education is organised into three stages: Junior Basic school, classes I—V; Senior Basic school, classes VI—VIII; and Post-Basic school, classes IX—XI. Here I shall concentrate on the first two stages because they coincide with the range of classes in the Elementary school as treated in this monograph. The Post-Basic school which is still in the embryonic stage corresponds to the period covered in the Higher Secondary schools.

While the Conference of Education Ministers held in 1957 reaffirmed the acceptance of Basic education as the national pattern of Elementary education, the process of converting traditional schools to Basic schools is proceeding gradually. According to data supplied by the statistical division of the Ministry of Education, the number of pupils in the Basic and traditional schools in 1956 was as follows:

Type of School	Number of pupils		
Basic Schools			
Junior Basic Schools (Primary)	3,730,459	
Senior Basic Schools	1,329,748	
	TOTAL	...	5,060,207
Traditional Schools			
Primary Schools	19,189,275	
Middle Schools	2,483,204	
	TOTAL	...	21,672,479

Theory of Basic Education

Basic education is undergoing healthy criticism by the professional fraternity as well as the lay public. Although it was first introduced twenty years ago, it is still in a fluid state. This has its advantages because its philosophy is also in flux. In my opinion the greatest threat to the potential development of Basic education is to freeze the principles upon which it is founded.

As a point of departure from my discussion, I shall use the Report of the Assessment Committee on Basic Education published by the Ministry of Education in 1956. The essential characteristics of Basic education set forth in this report are as follows:

1. It provides for an integrated course of eight years of Basic education.
2. It includes community living and work based on democratic student self-government under the guidance of teachers.
3. Craft work is systematic, ensuring minimum targets of production.
4. The children are taught by the correlated method, with correlation not restricted to productive work only but also extending to the natural and social environment.
5. A commensurate amount of extension work is provided, thus linking the school with the community and *vice versa*.
6. A library with suitable books is available.
7. Cultural and recreational activities are organised.

8. Examinations are wholly internal based on continuous progress and cumulative records.
9. Emphasis is laid on character and personality development without neglect of academic attainment.

Fundamentally, I am in agreement with a substantial portion of the philosophy of Basic education but I take exception to a number of principles. Here I present my dissent in brief outline; it will be developed in greater detail later:

1. Craft should have its place in the curriculum in proportion to its place in life, no more and no less.
2. Although correlation with the social and natural environment is recommended in principle, thus far it has been confined, with varying degrees of success, to the crafts alone.
3. Basic education centred around the craft and supplemented by correlation with subjects is not the whole curriculum.
4. The craft-centred approach should be expanded to include all the areas of living which together constitute a major segment of the curriculum.
5. *Social living* should consist of a series of purposeful projects from class I to XI based on community living.
6. *Social living* should be supplemented by the following major phases: daily routine activities; the basic skills of communication; the expressive arts; and individual interest.*
7. The basic skills of reading, writing, speaking, listening, and figuring should be learned not only through correlation (as they are needed) but also in a separate period of directed teaching at least during the first five classes.
8. The teaching of a craft for productive purposes should not begin earlier than the fourth class.
9. The production of articles in large quantities for sale or for subsistence should be secondary to the educative value of the process.

The Total Curriculum of Basic School

Because the interpretation of Basic education differs from State to State and from school to school, it is impossible to determine whether the total curriculum is balanced without considering at least two major factors, the subjects included in the syllabus and the degree of correlation of craft with these subjects.

First, therefore, I shall examine the scope of the curriculum as reflected in the syllabi and time-tables of the schools. The total life of the Basic school varies from place to place. For example, I was informed that Basic schools of the Punjab emphasise the educational more than the economic aspect.

* For diagram see page 15.

Scope of the Curriculum of Basic Schools

From my visits I gathered that the scope of the curriculum was affected by the time allotted daily to the crafts. Some schools allotted one period a day, others two periods a day. A third group allocated at least one-third of the daily school time to crafts. The latter fell into two groups: those which specified the subjects and the time allotted to each; and those which assigned a block of time daily to correlation.

The subjects and the number of periods per week in a Basic school in Howrah, West Bengal, were as follows: craft, six periods; health and personal hygiene, six; mother tongue, six; arithmetic, six; social and physical environment, six; games, three; creative activities, two; social education, two; music, dance and dramatics, two. The crafts consisted of spinning and agriculture. The social and physical environment included history, geography and science. The creative activities included drawing, clay-modelling and paper-work. Health and personal hygiene were correlated with craft. This syllabus was not unlike that of a traditional school in Madras which had added a craft period each day.

An example of the second group of schools was found in Chiragh village in Delhi where approximately one-fourth of the weekly time was devoted to crafts of spinning, weaving, paper-cutting, cardboard and agriculture. Approximately one-fifth of the weekly time was devoted to each of the subjects of Hindi, mathematics and social studies. The remaining subjects were general science, which consisted of three periods, and drawing, two periods.

The curriculum of a Junior Basic school in Rajasthan consisted of "practical activities" and "academic subjects". Craft, which was one of the practical activities, consumed one-third of the weekly time allotment, the remaining practical activities being prayer, meals, arts, physical education and rest. The so-called academic subjects consisted of Hindi, arithmetic, social studies and science.

The Basic schools in the third group allowed for greater flexibility. A Basic school in Delhi, for example, allotted about 90 minutes a day to "correlation" and 90 minutes to "correlated subjects", the latter consisting of arithmetic, mother tongue, writing and reading.

The teachers of a Basic school in Howrah made their own outline based upon the environment. They stated that they did not follow the syllabus regularly. Since, for example, the textbook in vernacular was too difficult, the teacher made his own choice of stories. The teachers of the Mylapore Basic school, Madras, met for two weeks in March to plan the syllabus for the whole year. In the urban areas the teachers came together once in two months to plan what they would do in the ensuing two months.

The Degree of Correlation of Craft with Subjects

Thus far I have examined the total curriculum of Basic education as reflected in the syllabus and time-table. These were quantitative and known factors, but the degree of correlation of all subjects with craft was more difficult to ascertain. In fact it varied from a negligible amount to an attempt to teach all subjects by correlation with spinning, weaving and agriculture.

It was the opinion of a headmaster of a Basic school in a village in Delhi that correlation as a method of teaching had not succeeded. To correlate satisfactorily, he said, it would require two or three hours daily to prepare teaching material. He felt that only a teacher's guide containing correlated lessons would overcome the difficulty. The headmaster of a Basic school in Chandigarh said that teachers resort to correlation only in April and May to create interest and get attention.

The headmaster of a Basic school in Howrah said that the children in classes I—III benefitted from correlation but that the classes IV and V did not. The difficulty stemmed from the lack of funds for craft materials and agricultural implements. The teacher in class II said that spinning was only of limited value in correlation. The teachers in classes IV and V stated that correlation was possible in arithmetic but in no other subject.

In contrast with the limited amount of correlation reported by most teachers, I found a school in Rajpura, Punjab, in which supposedly every subject was covered through correlation. The teachers formulated a general plan for each month and a specific plan for each day. Furthermore, each teacher also kept a record showing what correlations he had actually made. When asked to illustrate his teaching procedure, a teacher of the fifth class explained how he related percentage to attendance and area to the field under cultivation. In this manner, he maintained, the major topics of arithmetic taught consisted of percentage, area, unitary method, profit and loss and the calendar. The teacher gave me the impression that he was aware of the many opportunities to correlate the craft with most of the subjects.

The Curriculum of Basic Schools Lacks Balance

If the ultimate objective of the new education is "a balanced and harmonious life", then the school should have a balanced and harmonious curriculum. With the exception of drawing, aesthetic development of the child was neglected. Art, music, drama and the dance did not receive the emphasis that is needed for good living. In some schools the expressive arts were relegated to the category of co-curricular activities. The Basic school does not provide enough time and attention needed for the mastery of the skills in communication which include reading, writing, speaking, listening and figuring. The study of science is greatly under-emphasised in the time-table of the Basic schools despite the theoretical acceptance of the fundamental importance of the physical and natural environment.

On the other hand, the Basic school gives greater attention than the traditional school to health and hygiene, community service, practical activities, current events, co-curricular activities and self-government.

Appraisal of the Prevailing Practices in Basic Schools

My observations in twelve Basic schools revealed that the curriculum of Basic education was not completely balanced: the correlation of all subjects with the craft was only partially achieved; the teachers found it difficult to teach by the method of correlation; and Basic education remained subject-centred rather than life-centred.

To me correlation means the learning of facts or skills together, whether they fall into the same subject or not. For example the Punjab Primary school syllabus suggests that the study of the cotton plant which ordinarily is studied under science should be taken up when the children come to the study of *clothing* in social studies. Correlation is only the first step in the integration of learning. By the same token, the correlation of a subject with a craft is only a first step towards the integration of knowledge around life activities. The method of correlated teaching is an inadequate solution to the problem of education for living. The fullest correlation with craft is no substitute for a balanced curriculum consisting of social living, basic skills of communication, the expressive arts and individual interests.

In order to accelerate the transition from the book-centred to the craft-centred curriculum, the Director of Education in Jammu and Kashmir was instrumental in the preparation of an activity curriculum. Admitting that the proposed activity-centred curriculum is an approach to Basic education, the syllabus still remained subject-centred. The craft-centred school was a revolt against the book-centred school but it does not go far enough. The book-centred school should be converted into a life-centred school.

The Transition from the Craft-Centred to the Life-Centred Basic School

If the craft-centred foundation of Basic education is no substitute for a balanced curriculum for good living, then what is the remedy? Here I propose to suggest how a transition can be made from the craft-centred to a life-centred Basic school.

If, as Gandhiji said, "Education covers the entire field of life", then the curriculum should begin with life and not with a craft. The craft should have a place in the life of the school but no more and no less than its place in the life of man. In other words, Basic education should expand the single area of craft to include a balanced total curriculum resting on a foundation of social living.

Basic education apparently recognizes that the subjects are ends in themselves; that as each subject is studied, the topics are correlated with craft or with aspects of the social and natural environment. The result is that in most Basic schools that I have visited, the subjects are taught in the traditional manner.

The Assessment Committee on Basic Education frankly admitted that all subjects cannot be correlated with craft alone; that correlation should be extended to include the natural and social environment. Nevertheless, thus far the correlation of the subjects with craft has been largely incidental and correlation with the natural and social environment has been negligible. The Assessment Committee on Basic Education, after visiting twelve States, came to a somewhat similar conclusion. Quoting the report, "Correlated teaching is improving only very slowly. Correlation with the natural and social environments is very inadequate."*

* Report of the Assessment Committee on Basic Education, Ministry of Education Government of India 1956, p. 22.

If the purpose of Basic education is to be achieved, it is necessary to begin with the problems of living. As suggested in chapter II, the total curriculum should be sketched in broad outline based on five major aspects: social living, daily routine activities, basic skills, expressive arts, and special or individual interests. It was proposed that a block of time should be devoted daily to social living in every class from I to XI. A brief outline of each of these phases is shown in the chart on page 15.

Social living is the core of the curriculum. It suggests, grade by grade, what problems should be studied in each of such major areas of living as home life, recreation, citizenship, economic life, transportation and communication. Whether these or other areas are acceptable depends upon the curriculum planning group. In any event, it is necessary to begin with a study of how people live. Beginnings in this direction have been made by the National Institute of Basic Education which after breaking life down into its major areas, suggested how to determine the specific activities to be included in the curriculum. It was also shown that several syllabi in social studies were based on current social living.*

The Distinguishing Characteristics of Social Living

For the purpose of clarifying the concept of *social living* as a phase of the total curriculum, its distinguishing characteristics are here briefly summarized:

1. The core consists of the common elements which make up good living in a democracy. It is the Basic education of all children and youth.
2. A large block of time is devoted daily to this phase of total school life.
3. The core is made up of a sequence of units of work selected with reference to the major areas of living, such as home life, economic life and citizenship.
4. The pupils have a part in deciding what they shall learn and in planning their work.
5. The pupils have a wide variety of active, lifelike and creative experiences.
6. They have many outlets for self-expression and for the development of their talents.
7. The pupils work together in groups and gather from time to time to share their findings with the rest of the class.
8. Information is drawn from all the conventional subjects as the need for it arises.
9. The pupils have access to a variety of sources such as books, pamphlets, periodicals, informed persons, field trips and films.
10. The pupils live in a cheerful and stimulating learning environment that is abundantly stocked with materials for active and lifelike learning.

*The reader is referred to pages 12-13 for a fuller treatment of analysis of Social living made by educational groups.

The framework of social living is built on one axis showing areas of living and the second axis representing the progressive levels of social development. The areas of living help to decide what shall be learnt, the levels of social development help to decide when it shall be learnt. This framework of social living shows, class by class, what projects should be undertaken by the pupils. Thus upon leaving the school, the learners will have sampled all the areas of Indian culture.

The Basic Learning Unit of Social Living

The basic learning unit of social living is a project in which the learners work together to reach their own goal. Essentially, it is an enterprise in which the pupils undertake to solve a problem of individual or community living. Each pupil contributes his share to the common goal of the group. This concept is substantially in harmony with the characteristics of learning set forth on pages 14-15 of the Report of the Assessment Committee on Basic Education, published by the Ministry of Education in 1956. The Committee maintains that "the choice of an activity should arise out of the natural and developing life of the learner and it should be directed towards a purpose recognized as necessary by him and with a decision on his part to carry it out as fully as possible." The Report goes on to say that the child should understand the *why* and *how* of what he does. Activity that is satisfying stimulates the learner to do continuously better work. He is motivated to gain knowledge which fulfils a real want. The learning activity should be conducive to the successful adjustment of the individual to his environment. The children should have an opportunity to evaluate the outcome of an activity.

Some Special Aspects of Basic Education

Up to this point my attention has been focused on such general aspects of the total curriculum as the theory, scope and balance. I have tried to suggest how the core of Basic education should be shifted to *social living*. To round out this analysis I wish now to review such special aspects of Basic education as the teaching of craft, the role of books, and lifelike activities.

The Teaching of Crafts

The number of crafts taught in the Basic schools which I visited varied from one to five depending upon the degree of commitment to the principles of Basic education, the resourcefulness and experience of the personnel and the availability of equipment. Spinning was the most common craft and in some schools it was the only craft. In schools which devoted more than one period a day to craft, agriculture and other occupations were added usually in the fourth and fifth classes. Where looms were available, weaving was taught to a limited number of children. In all of my visits to Basic schools, the following crafts were taught: spinning, weaving, agriculture and gardening, tailoring, bookbinding and paper-cutting.

The sequence of crafts in the Junior Basic school in Rajpura was as follows: infant, spinning on *takli*; first class, spinning on *takli*; second class, spinning; third class, agriculture for boys and weaving for girls; fourth class, advanced agriculture for boys and advanced weaving for girls; and fifth class, gardening for boys and spinning

and weaving for girls. The vegetable products were sent to the market and the spun and woven articles were used in the school and sold in the township. The craft equipment included spinning wheels, buckets, farm implements and scales. In the weaving room pupils were weaving *nivar* for *charpais* and carpets.

The craft in a Basic Middle school in Jaipur included spinning, weaving, gardening, tailoring and bookbinding. The equipment included Gandhi *charkha* and the school recently obtained an *ambar charkha* also. The children made axle brushes, *daris*, and floor mats. The boys either took these objects home or put them on sale. The teacher kept a record of the boys' earnings which were given to them whenever they left the school.

I visited a class in an urban setting in Delhi in which the craft activities consisted of soap making, chalk making, candle making and weaving of mats. While the crafts here were varied and lifelike, they could be expanded to make things for pleasure as well as for knowledge.

The vegetables and spinning products in the Basic school of Mylapore, Madras, were sold and the proceeds were remitted to the Corporation. Last year, the school realised a total sum of Rs. 3 from its output. Nevertheless, the headmaster was optimistic enough to predict that in five years the income from the sale of products would be sufficient to pay the salaries of the teachers.

One of the major aims of Basic education is to make each individual self-supporting. To achieve this goal, it is the practice in Basic schools to begin training for an occupation in the first class. It does not seem to me necessary to begin occupational training at such an early age. To centre early education around a profit-yielding occupation is to exploit the young. Assuming that the pupil is ready to contribute to the family income at the age of 14—the end of the period of compulsory education, it should not be necessary for him to begin to learn a village craft until the age of 10 or 11. Upto that time the child should have an opportunity to work with other media of arts and crafts for creative expression and for the enrichment of his leisure.

The Role of Textbook in Basic Education

The practice regarding use of books in Basic schools varies from complete avoidance of printed matter to the prescription of textbooks identical with the traditional schools. The children in a Basic school in Delhi learned to read from sentences written on the black-board by the teacher. This is a good way of creating a readiness for reading, particularly if the sentences are based on the children's experiences. However, the children should begin reading from simple books as soon as they are ready, which they don't do in this particular school.

A Basic school in Rajpura which claims that it strictly follows the Wardha syllabus uses no textbooks. The headmaster said that he had no objection to the use of books but he felt that the children should not depend on textbooks alone. Furthermore, he felt that there were no available textbooks which were adapted to the needs of Basic education. Incidentally, during my visit to Madras, I learned that the State has produced two books in gardening and health specifically designed for Basic schools.

In a Junior Basic school at Howrah, the children in classes I and II used no textbooks, but in classes III and IV they had books in mother tongue, arithmetic and social and physical environment. In class V, they had an additional book in English. The headmaster did not have a high regard for these textbooks. He stated that they were not properly graded and that the poems in the vernacular were too difficult. They were learnt for the melody and not for the meaning.

At the other extreme, the children in the Junior Basic school in Chiragh-Delhi had textbooks for the following subjects. Hindi, mathematics, social studies, science and drawing.

The emphasis on learning from experience is a highly desirable trend for which the Basic school should be commended. But this should not imply the exclusion of the use of books in the early grades. The basic skills of communication, particularly reading, are most effectively learnt in the Primary classes with the help of printed books. To ignore the value of books is to deprive the child of the advantages of the invention of printing. The books should serve as valuable sources of information whenever they contribute to the pupils' need for knowledge. A book is very often a man's best friend.

Lifelike Activities of the Basic School

Basic education has a number of distinctive commendable features. Its flexibility is conducive to such lifelike activities as community service, self-government, and economic enterprises. In most of the Basic schools the review of current events based upon the newspaper and radio is a daily occurrence. The Basic school tries to imbue the pupils with a spirit of social service through practical projects in the improvement of school and community surroundings. In addition, the children are encouraged to take part in self-governing activities. I visited the Jamia Millia Islamia Basic Primary school, Delhi, where I was welcomed by the student Prime Minister whose costume had the semblance of that worn by his national counterpart. The school is a little democracy and the pupils are its citizens.

The Prime Minister led me through a formidable array of economic projects each of which simulated an enterprise in real life. I saw the tuck-shop, school supply store and bank in actual operation. The programme of co-curricular activities also included excursions, festivals, games and physical activities.

In Nai Talim Primary school at Rajpura, Punjab, I was attracted by a cooperative store in which peanuts, *chaval* and *dal* were sold at 3 pies* a *chhatak*. The store also sold stationery, paper, erasers and booklets. The clerk dictated the amount of sales to the teacher who entered them into the account book. The total income in August, 1957 was Rs. 21.32 and the balance was Rs. 116.38.

Articulation of Basic with Traditional Schools

The assimilation of the Basic schools into a unified system of continuous education is a problem which will have to be solved in time. The pupils leaving the Junior Basic school are afterwards admitted to the traditional Middle school. Similarly, the pupils leaving the Senior Basic school are admitted to the traditional High school or

* This would mean two naye paise in present currency.

Higher Secondary school. It appears, however, that the pupils who transfer from Basic schools to the traditional schools find it difficult to keep pace with their classmates. It is because of this difficulty that the Delhi Directorate of Education recently decided to prepare a common syllabus for both Basic and Non-Basic schools.

The workers in the field of Basic education feel that there is a need to establish a continuous pattern of Basic education from the first to the eleventh class. Thus the pupils will not be confronted with the necessity of adjusting themselves to a curriculum with which they are not familiar.

The problem of admission to college of the students who leave the Post-Basic schools has not yet been fully solved. Many graduates of Post-Basic schools may not pursue higher education. Those who will may join the rural institutes or take technical or vocational courses suited to village needs.*

It seems to me that the problem of articulation of Basic and traditional schools will be solved only if the multiplicity of types of schools is unified into a single, coherent and continuous system in which every diversified course or stage is an integral part of the whole. The Education Secretary of West Bengal said that his State has ceased to make distinctions among the various types of schools. West Bengal, if I understood him correctly, has only one school system from the lowest to the highest class. Thus it is possible for the pupil to move upward from class to class without disrupting his educational progress.

Conclusion

This chapter began with an affirmation of faith in the future of the Basic school. Nevertheless, Basic education was subjected to rigid scrutiny. As this brief discussion comes to a close, it is appropriate to summarize the assets and liabilities of Basic education.

Basic education is devoted to the advancement of individual and group life. It has charted a new course on a foundation of better living. The Basic school has freed the children from regimentation and has encouraged self-expression. It has attempted to revive the finest elements in the national culture. It stresses the moral idealism and spiritual aspirations of Indian traditions. The Basic school has imbued the young with a spirit of service to the community. It has sought the guidance of the most advanced principles of learning. It has cultivated a respect for the worker and gainful work. It has converted the school into a little democratic community. It has freed the teacher from external restraints and has allowed him considerable latitude for individual expression.

To achieve the good life the foundation of Basic education should be expanded from the craft concept to encompass the whole of life. *Social living* should be a recurring daily segment of the school life devoted to a continuous sequence of purposeful projects. The craft should have no larger function in the curriculum than it has in life. The teaching of craft for productive purposes should become secondary to its educational value. To achieve a balanced total Basic

* When Post-Basic students take examinations arranged for them by Higher Secondary Boards, they will also become eligible for admission to institutions of higher education like other students completing the Higher Secondary course.

education, its design should comprehend not only social living but also such other major aspects of the curriculum as the Basic skills of communication, expressive arts, individual interests, and daily routine activities.

Summary and Recommendations

1. Basic education should expand the single area of craft to include all the areas of living which, together, constitute a major segment of the curriculum.
2. *Social living* should consist of a continuous sequence of purposeful projects based on community living.
3. Craft should have its place in the curriculum commensurate with its role in life.
4. The basic skills of communication should be learnt not only through correlation but also through directed teaching.
5. The teaching of craft for productive purposes should not begin earlier than the fourth class. In the Primary classes, the child should have an opportunity to work with crafts for creative expression and for the enrichment of his leisure.
6. Art, music, drama and dance should receive the emphasis that is needed for good living.
7. The application of science to daily living should be given greater emphasis.
8. The pupils should have an opportunity to make things for pleasure as well as for profit.
9. The emphasis on learning from experience should be continued, but the children should also use books as valuable sources of information whenever they are needed. The children in the Primary classes should begin reading from simple books as soon as they are ready.

CHAPTER V

SECONDARY SCHOOL CURRICULUM

It is now generally agreed that the Indian Secondary school of the future will consist of classes IX—XI and in accordance with the recommendations of the Secondary Education Commission, the number of such schools is increasing. Actually the most common Secondary school at the present time consists of only two classes, IX and X. The Secondary school consisting of two classes is commonly called the High school; of three classes, the Higher Secondary school. It was pointed out in the first chapter that two State school systems have combined the whole or portions of the Middle and High school into one stage, but for purposes of consistency, this chapter will deal exclusively with classes IX—XI.

Some General Considerations

As suggested in chapter II, greater flexibility of the High school curriculum can be achieved by lengthening the period of Secondary education to six years. It should be noted that the Secondary Education Commission saw fit to include the Middle school within the limits of Secondary education, but continued to regard it as a separate unit. The Commission, however, did suggest the same broad courses for the Middle stage which it suggested for the first year of the High school stage.

Presumably, the students will withdraw from the school when they finish class VIII, which coincides with the end of the period of compulsory education. For the convenience of this group, the High school can be divided into two parts of three years each, preserving as much continuity as possible. The expansion of the High school to include six classes would enlarge the teaching staff and physical facilities. It makes possible to teach more subjects; to offer a richer programme of electives and co-curricular activities; and to make fuller use of the library, laboratory, and the facilities for games and sports.

The Production of Secondary School Syllabi

The power to prescribe the curriculum of the Secondary schools in each State is usually vested in a Board of Secondary Education although the particular name of this body varies from State to State. In three of the States that I visited, the syllabus is under the control of the university. It is the function of the board of Secondary education to determine the general policies which affect the curriculum directly or indirectly through examinations. Each board has a curriculum committee which determines the membership of the syllabus committee for each subject. In all cases the examinations follow the syllabus rigidly which means that it is also followed closely in the textbook and lectures.

Let us look at the operation of the system in one State. The Bombay Secondary School Certificate Examination Board is a purely

examining body, which nevertheless controls the curriculum through its examination system. The Board determines the courses in which the examinations are offered, departments or groups into which they fall, and the patterns of compulsory and optional subjects of the individual candidates. A General Committee with the assistance of a Deputy Director of Education coordinates the activities involved in the production of the syllabus.

The Bombay Secondary School Certificate Examination Board issued a prospectus in 1957 which specified the subjects for which examinations are offered, the courses of study and the textbooks for each subject. Each student is required to take seven examinations, the particular combination of subjects depending upon the student's limited choice within the compulsory and optional groups. Since the seven examinations given at the end of the third year of the Higher Secondary school are comprehensive in nature, they indirectly affect the curriculum of all the three years of the Secondary school.

The syllabus in each subject is prepared by a course committee consisting of five members, three of whom are teachers. It is the function of the course committee to outline the content upon which the examination in a particular subject will be based. The syllabus, therefore, consists of a topical outline for each subject varying in length from a few lines to not more than three pages.

The Role of External Examination

The dominant role of the examination system in the life of the Secondary school teacher and pupil is set forth in detail in the first chapter. The external examination is one of those rigid controls which restrict the freedom of the individual school to adjust the curriculum to the needs of the students and to the neighbourhood which it serves. It retards progress through experimentation and stifles the initiative of the headmasters and teachers. It makes it difficult to develop a curriculum designed to educate the youth for good living.

The examinations are destined to be reformed in the future, but the examination system will persist until the incubus of external controls is lifted. Ultimately, it is hoped, the teachers will play a more important role in preparing the examinations. The instruments of evaluation will be designed to determine what progress a student has made and whether the goals of a particular subject were reached. The form of the instruments as well as the test items will vary depending upon the objectives of the particular subjects.

An important feature of the new syllabus for the Secondary schools in Punjab is the provision for the internal assessment of the student's progress. While it continues to recognize the external examination, it specifies that the internal assessment should account for 25 per cent of his aggregate score. Furthermore, in order not to overburden the student, the Higher Secondary examination has been divided into two parts. The first part, covering the compulsory subjects, is conducted at the end of two years of study and the second part, covering the elective group, is held at the end of three years of study.

Rigid control of the syllabi and examinations tend to discourage experimentation. In spite of these limitations steps are being taken to encourage the schools to try out new plans of organization and new teaching practices. Given freedom, the headmasters can be

trusted to initiate projects which will improve instruction. For example, a committee of headmasters made such suggestions for the improvement of teaching as: opportunities for original work, creative thinking and first-hand experiences; developing initiative through projects planned and carried out by pupils; and guidance in developing good study habits. In Bombay there are several experimental schools that are free to develop their own programmes of study. The All-India Council for Secondary Education is contemplating the organization of a nation-wide chain of experimental schools. Projects of this nature on a national as well as regional scale in the United States have had profound influence on the progress of Secondary education.

An Appraisal of the Secondary School Curriculum

The most practical approach to an appraisal of the Secondary school curriculum is through an examination of the school in action. I shall make a detailed analysis of a High school curriculum, briefly review the programme of the Higher Secondary school and conclude with a cursory examination of the co-curricular activities.

The High School Curriculum

The distribution of weekly teaching hours among the various courses is one way of determining the degree of emphasis upon the several subjects of the curriculum. An examination of the time-table of a High school (classes IX-X) course in Delhi shows that the compulsory subjects for each of the two successive years and the number of periods per week devoted to each were: English, 12 periods; mathematics, 10; and vernacular, 8 periods. In addition the pupils may choose two from the following list of optional courses each year: drawing, 6 periods; general science, 6 periods; physiology and hygiene, 6 periods; economics, 6 periods; history and civics, 6 periods; and Sanskrit, 6 periods.

The inference from an inspection of these figures is that there are a number of possible improvements. The course is unbalanced in time allotment and in the scope of subjects studied. The compulsory subjects are greatly over-emphasized and the optional subjects are under-emphasized.

Of the 42 periods per week, 30 are devoted to language and mathematics. Assuming that the pupil chooses science, he will have 24 periods of English, 20 periods of mathematics and only 6 periods of science. If he chooses both science and physiology, he will have 12 periods. If a pupil elects history and civics, he will have not more than 6 periods and if he fails to elect either history or economics he will leave the High school without having any social studies. With the exception of geometric drawing, the expressive arts are completely neglected.

According to the pupils interviewed, English, which received the greatest emphasis, was the least useful to two of the three boys. Both the headmaster and the pupils agreed on the need for the addition of practical subjects. The headmaster's suggestions were carpentry, typing and handicraft. The pupils suggested wood work, metal shop and crafts. The headmaster stated that the curriculum was designed primarily to prepare the students for the university, although they could enter the university only after passing an examination at the end of one year of pre-university studies.

Sixty per cent of those who pass the matriculation examination would like to go to college, although there is no assurance that they will clear the additional hurdle imposed in this particular State at the end of one year of pre-university studies. The 40 per cent of the pupils who do not go to college will probably apply for clerical work without having had any High school training either in typing or in office practice. A review of the day's activities reported by the boys interviewed showed that the curriculum fell short of preparation for either life or an occupation.

The revision of the Secondary curriculum cannot be made by a stroke of the pen, but in this specific situation a number of changes could be introduced gradually. For the sake of concreteness, I take the liberty of making the following suggestions:

1. General science, history and civics, physiology and hygiene should be made compulsory.
2. Mathematics should be reduced to one period a day in class IX and made an optional subject in class X.
3. Since growth is continuous, the curriculum should be continuous from class to class.
4. English and vernacular should be taught in the last four classes, six periods a week.
5. The expressive arts, industrial arts, physical exercise and co-curricular activities should be added to the High school stage.
6. The Problems of Indian Democracy should be a compulsory subject in the tenth class.
7. With the exception of languages, it should not be necessary to continue each subject from class IX to X.
8. The number of subjects in each class should be reduced to five and the students should have one study period each day.

The Higher Secondary School Curriculum

The preceding critical analysis of a High school curriculum would be incomplete without a brief summary of the courses offered in a Higher Secondary school for boys and another for girls. In order not to burden the reader with repetitious comment, the course outlines are presented without an appraisal of the strengths and weaknesses.

The curriculum of a Higher Secondary school for boys in Cuttack consisted of nine subjects in class XI and seven subjects in classes X and XI. In addition, a student was allowed one optional subject in classes X and XI. The compulsory subjects were English, a modern Indian language, Sanskrit, mathematics, social studies, science, drawing, and Hindi. Drawing and Hindi were discontinued after class IX. The student chose one of the following optional subjects: advanced mathematics, advanced Sanskrit, physiology and hygiene, advanced drawing and handwriting.

The curriculum of a Higher Secondary school for girls in Delhi consisted of an academic and science programme of studies. The academic programme included the following compulsory subjects; vernacular (Hindi or Bengali), English, mathematics (higher and lower). "Lower mathematics" consisted of arithmetic and domestic science which were taught separately. A small percentage of the students chose higher mathematics. The science programme consisted of the following subjects: higher mathematics, physics, chemistry, biology, geometry, mechanical drawing, English and vernacular for one year. In addition the student was required to choose two subjects from the following: civics, history, Sanskrit, music and drawing.

Co-curricular Activities

The Indian Secondary school recognises the importance of hobbies and recreational activities in the life of young people, although many schools have developed only a limited programme thus far. The activities vary from school to school but they usually consist of games, sports as well as musical, dramatic, debating and literary clubs. The co-curricular activities in the Pattan High School in Srinagar fall within and without the school time-table. The programme consists of games, excursions, debates, musical and other activities.

The private schools for the children of middle and upper class families have developed the most comprehensive programmes of voluntary activities. For example, the student body of the Government Senior Model School in Chandigarh has organized four groups or houses as they are called. Each house is composed of about 80 boys from all classes. The members engage in competitive activities within the group and also between the houses. The activities of each house include basketball, hockey and other sports. In addition, the school has an arts club and conducts other activities like gardening, scouting and girl guides.

The Modern School in New Delhi devotes two periods each week to co-curricular activities which include art, craft, music, games, aesthetics, debating, library, dramatics, and hobbies. The school breaks up into groups each under one house master. The membership of each house covers all classes in the junior and senior school. There are eight houses yielding eight activity groups based upon a variety of interests.

The small school with a staff of no more than ten teachers can offer very few co-curricular activities. The best arrangement in this situation is to allot one period a day for the voluntary interest groups. The real problem, however, is to find persons who have enough interest in a hobby to lead a group of pupils. This arrangement converts the voluntary activities into an integral part of the curriculum. The clubs and other informal activities offer an opportunity to develop life-time leisure activities.

The Introduction of Student Self-Government

Some of the Secondary schools are feeling their way toward introduction of student self-government. Shri Mahavir Digamber Jain High School in Jaipur has organized a representative assembly consisting of five representatives from each class. Each class in the

Peary Mohan Academy in Cuttack has a council of five members, but the whole school has no student government. The Government Senior High School in Chandigarh has organized the *Panchayat* consisting of the school captain and the captains of the houses. This body is responsible for the purchase of the sports equipment, library books and reading room materials. It arranges for field trips and other school-wide functions.

These are commendable beginnings. However, there is an absence of self-government in most of the Secondary schools that I visited. There should be a greater emphasis on self-government in democratic India. The self-governing activities are the best means of preparation for effective citizenship in a free State.

Participation in Community Life

The school is a social institution and along with the government, agricultural agencies and community development projects, it shares responsibility for raising the level of living in the community. The project in community improvement has not only great learning value but also cultivates a disposition to contribute to the general welfare.

The improvement of the community begins with the improvement of the school. I saw a group of boys in one of the most exclusive schools in Madras digging a drain. Each class in this school is required to devote one hour every week to manual labour. In Mattan High School in Srinagar, the pupils have helped in the construction of buildings, levelling playgrounds and planting shade trees.

Some schools are more community-minded than others. A High school for boys in Timarpur, Delhi, sends its boys to a social service camp where they assist in such projects as building roads. They also participate in cleaning up their own neighbourhood. A group of headmasters in Bombay reported such services to the surrounding communities as helping the villagers in the crop season, collection of a relief fund, giving entertainments in a village, and conducting film shows for the public.

Improvement of the Learning Process

The Principal of an outstanding Higher Secondary school, attended by a considerable number of pupils from Western countries, said that the Indian student excels in factual information while the Western student is superior in applied knowledge. The inference, I presume, is that Indian teachers are proficient in imparting information and deficient in teaching the students how to apply knowledge to everyday problems. With the exception of the use of charts and laboratory apparatus in science classes, learning in most of the classrooms was verbal and passive. The pupils took notes as the teacher lectured. It was apparent that the curriculum was dominated by the textbook and by the impending examination. When I asked the headmaster to give me a general idea of how the pupils are taught, he said: "The Teacher has a diary in which he writes an outline of the day's work. He presents the matter and then asks questions."

The Lecture-Recitation is the Most Common Teaching Procedure

The most common learning procedure in the classes observed is of the lecture-recitation type. The recitation is a perpetuation of primitive lesson hearing multiplied. It is still an individual relationship between the teacher and the pupil.

As I sat in the classroom of one good teacher, I observed that the pupils usually answered in a word, phrase, or a sentence and occasionally in a paragraph. The questions which ordinarily called for fluent and extended remarks elicited only fragments. When the teacher thought the answer was good, he repeated it and sometimes expanded on it. The pupils, in essence, were encouraged to ignore each other since the right answer would be repeated by the teacher.

The pupils had very little opportunity for self-expression. They had no awareness of the goal; no conception of the topic as a whole; no knowledge of the relation of the parts; and no opportunity to weave the parts together into a complete whole. On the other hand, the teacher was well informed; grasped the topic as a whole; and made the transitions from part to part. In other words, the teacher did all the learning. He appeared to be more interested in his performance than the pupils' performance.

The external final examination takes so much of the teacher's attention that he is obliged to stick closely to the textbook of both the compulsory and optional subjects. He dare not divert the student's attention from the textbook by the use of supplementary printed materials, literary masterpieces, or current publications such as documents, pamphlets, magazines and the daily press. To be sure the school has its rudimentary library, but its resources are limited and its use is restricted.

There were some notable exceptions. One of the best libraries was found in the Madras Christian Boys High School. It had a large collection of books on open shelves. According to the headmaster, about 80 per cent of the students were in the habit of taking books home for ten days. The boys were given problems which made it necessary for them to use reference books during the period allotted for this purpose. The librarian gave the pupils training in the use of the library by means of problem cards designed for this purpose.

Learning to work in Groups

I encountered only one instance of group work in my visits to a number of Secondary schools. A history teacher who had attended a seminar on social studies divided his class into two groups, each group studying a topic from a different point of view. After several days of study and discussion, the leader of each group made an oral report to the whole class. This teacher made a beginning in the direction of group work. His experimental approach was encouraging even if it had some serious flaws.

There is a very great need for the pupils to learn to work together in small groups. Even the adult groups with which I met were inexperienced in conducting an orderly discussion. They could not resist the temptation to give vent to their opinions in the midst of another person's remarks. Sometimes the meeting degenerated into a number of small groups talking at the same time.

Life in free India will provide an increasing number of situations in which groups will need to arrive at a harmonious solution of their problems. The school is the common meeting place for young people of different social, economic and religious backgrounds. As they work intimately with each other in small groups, they learn to understand and like each other in spite of their differences.

In the conventional classroom, the pupils worked exclusively as individuals. Although the room contained thirty or more students, each learner was isolated from all the others around him. Communication and cooperation were not encouraged. The teachers will have to recognize the learner's need to be able to find common areas of agreement and to arrive at decisions acceptable to the group.

The art of sharing opinions is not easily mastered. The teachers need to give attention to the development of the skills in group discussion. This does not imply that the class should be given systematic instruction at any one time. On appropriate occasions, particularly early in the year, the pupils should pause to consider questions such as: How can the group keep the discussion moving towards its goal? How may the group keep from being sidetracked into minor problem? How many one or two pupils be kept from dominating the discussion? How may violent emotional differences be avoided? How may friendly disagreements be encouraged? What is the function of a leader of a discussion group?

Democracy demands a greater emphasis on learning together, working together, and living together. This basic challenge should stimulate the teacher to create a social environment in which the young share in making decisions and in assuming the obligations of potential citizens of free India.

The Discussion of Controversial Issues

During the campaign of non-cooperation, Rabindranath Tagore opposed the boycott of schools. When some of the students differed with him, he proposed a vote on the question. The vote showed an overwhelming majority against his view. He rose and said: "Today is for me a day of victory because my students have said freely and bravely that I am in the wrong. I do not admit that I am wrong, but I want you to have the courage to say so if that is your conviction. And if every one of you should hold an absolutely different view from mine, even so, Santiniketan will still be your home. It is my duty in Santiniketan to guard the freedom of your mind as the most precious thing in the world. That is the mission of Vishvabharati."*

I heard practically no discussion of controversial questions in the classroom I have visited so far. It seemed to me that there was a need to convert the classrooms into a forum of free discussion. The ability to discuss an issue and to come to a harmonious decision is indispensable in a free society. The pupils should learn how to pool their resources in the solution of a common problem. They should be able to report their findings so that they are interesting and understandable.

*Rodrigues, D. "Tribute to Rabindranath Tagore". Times of India, Sunday Magazine, May 12, 1957, p. 1.

The Encouragement of Problem Solving

The Secondary Education Commission recommends that teaching of projects or units should be a common procedure in the social studies. With a single exception, the solution of a large problem as a learning procedure was not observed in any of the classrooms that I visited. Problem solving is particularly appropriate in the field of social studies. It is the most appropriate medium for the introduction of projects in community living. This is a big step forward which is reported in some syllabi and in educational literature. In chapter I of this monograph, the procedure for purposeful learning is briefly described. It involves planning, group work, research, sharing, reporting, use of community resources, field trips and interviews with informed persons.

The fused course in social studies is being tried in several States but integration is easier in theory than in practice. The teacher whose class I visited said that all the activities suggested in the syllabus were not practical. Nevertheless, she pointed out that the study of communications included the first-hand study of different ways of sending messages, as well as original composition of songs, dramatization, and short speeches by students. In general, she said that she still depended largely on the recitation although students formed groups from time to time and the participation of pupils was more extensive. The ultimate fusion of history, geography and civics into a single subject is a worthy aim. The schools which are ready for this step should be encouraged to continue to experiment with this effective instrument for the social education of the young.

Improvement of the Total Curriculum

The late Maulana Abul Kalam Azad, Minister of Education, said in one of his speeches that "The aim of education is to train the child to become a useful member of society". While the headmasters whom I interviewed would probably accept this view, they have no clear sense of direction. Neither the teachers nor the headmasters have a clear understanding of the relative importance of subjects in the Secondary curriculum. When I asked a headmaster why English is given two and half times as much emphasis as science he groped for an answer and finally ascribed the practice to tradition. In the same school the requirement of ten periods per week for mathematics serves no useful purpose. On the other hand, the students who were preparing for entrance to a Technical college were limited to only one course in physical science.

In another Higher Secondary school, a girl was permitted to substitute lower mathematics plus a practical subject for higher mathematics. On the other hand, the boy could only substitute geometric drawing for higher mathematics. The boy whom I interviewed was unable to explain why he, too, could not have taken a practical subject particularly when he wished to study a craft.

Each school should be given greater freedom to adjust the curriculum to the needs of the particular student. Under the leadership of the headmaster, the teachers should spend some time in clarifying their goals.

The teachers do not always have a clear conception of the aims of their particular subjects. At times, when the aim was given, the learning activities prescribed in the curriculum did not lead to its achievement. For example, while ability to speak English correctly was given by a teacher as his major goal, the teaching plan said practically nothing about conversation.

A Balanced Secondary School Curriculum

In the second chapter, I outlined the framework of a balanced curriculum based upon a conception of good living. It was pointed out that the plan of Secondary education should be based upon five components: social living, expressive arts, communication skills, daily routine activities, and special interests. From the point of view of relative emphasis, it may be said that the total curriculum consists of two approximately equal parts: 1, general education (compulsory); and 2, special education (optional). The core of compulsory subjects includes social studies, science, languages, expressive arts, and physical training. The optional subjects include six career groups: college entrance, industry, agriculture, home-making, and fine arts. In this optional category, I would also include free electives and co-curricular activities.

Generally speaking, this pattern is in harmony with the recommendations of the Secondary Education Commission with the following minor exceptions:

1. Health and physical education should be added to the core of compulsory subjects.
2. Craft which is one of the compulsory subjects should be expanded to include the expressive arts. With one or two exceptions, the suggested crafts contained in the Draft Syllabus for Higher Secondary Schools prepared by the All-India Council for Secondary Education have an occupational colouring. The vocational emphasis is the function of the specialized programmes of study. The arts and crafts should provide an outlet for the development of hobbies and other recreational activities for the enrichment of leisure. They should include such activities as music, drama, painting, sculpture, and the dance with a certain amount of freedom and flexibility under the guidance of a competent teacher.
3. The allocation of courses to the optional subject groups is not sufficient for competency in each of the particular careers. With the exception of the humanities and science, the suggested courses in each group will not provide the needed preparation for the successful pursuit of an occupation.
4. In order to complete the ambitious programme outlined by the Commission, a year will have to be added to the High school stage. The reasons for this view are the liberal programme of general education, the heavy language load; and the limited number of optional subjects in the career groups.

The new pattern of Secondary education in Punjab closely follows the recommendations of the Secondary Education Commission. In this State the Secondary school curriculum is controlled by the Punjab University. Fortunately, the newly appointed Vice-Chancellor who had a good understanding of Secondary education took the initiative in the modernization of the syllabus. Some of the deficiencies of the old syllabus were enumerated in the course of conversation with a headmaster who said that in the past general science was neglected and mathematics was over-emphasized. He said that the social studies consisted of history and geography and completely bypassed civics and economics. Another serious omission in the curriculum was the absence of handicraft and music for girls.

The recently revised syllabus for the Punjab Secondary schools was broadened to include English, Hindi or Punjabi, social studies, general science, mathematics, and craft as compulsory subjects. The electives fall into the following groups of related subjects: humanities, science, technical subjects, commerce, agriculture, fine arts, and home science. The student is required to take four subjects in each group.

The new syllabus gives the student an opportunity to select a programme of studies in accordance with his aptitudes. It is not assumed that every school will immediately be able to offer all the suggested groups of subjects. It is recognized that although the change will come gradually, it opens the way for the addition of programmes of study as soon as an individual school has the necessary enrolment and the financial resources.

Diversification of Courses

The term Multipurpose school stands for an idea rather than for a common practice, at least in the literal sense of the word. Since I have not encountered a Secondary school which offers more than two fields of specialization, it would be more nearly correct to call the Multipurpose school a dual-purpose school, at least up to the present.

The recent establishment of three "multi-lateral" High schools in Srinagar is a case in point. In addition to the academic course, each school also covers one of the occupational fields of commerce, agriculture, and engineering. The particular school which I visited offered two main "streams": academic and commerce. The student begins to specialize in one of the two streams in the eighth class. In addition to the academic subjects, a boy in the commerce stream is required to take elements of commerce, book-keeping and two of the following three subjects: commercial geography, shorthand and typewriting; and elements of banking.

The term "Multipurpose schools" as conceived by the Secondary Education Commission "seeks to provide varied types of courses for students with diverse aims, interests, and abilities". The provision for a choice between two separate programmes of students is only a first step toward a comprehensive school. In the future, as enrolment increases, the physical plant is enlarged, and additional personnel is provided, the High school should become a truly Multi-purpose institution which provides several different programmes of study.

The policy of diversification of courses imposes an extra responsibility upon the teacher for the guidance of the student. He will need advice not only on his personal and social problems, but also in the choice and planning of his programme of studies. In the long run, the teacher is the student's most helpful guide and adviser. The teacher will have to take greater pains to discover the student's special abilities and weaknesses. A special ability in science or mathematics is most effectively discovered by the teacher in science or mathematics. The encouragement of a special interest such as the drama, music, and art are most intimately disclosed in the relationship between the student and the teacher. The choice of an occupation is often revealed in the quality of the student's work in the various subjects.

The Curriculum should meet the Needs of the Students

The Secondary Education Commission charges that the school does not meet the needs of the adolescents. The most common criticism which the members of the Commission heard during the course of their investigation was that the curriculum is dominated by examinations and as a result it is bookish, narrow in its scope, and impractical.

In the re-examination of the total curriculum pattern, the planners should ask themselves whether the curriculum meets the needs of the youth. At present the student's needs play a minor role in determining what is learnt. In support of this view, may I cite a few specific situations?

I had a revealing interview with a fifteen-year old boy who was a student in the tenth class of a school located on the outskirts of Delhi. His courses consisted of English, 15 periods per week; trigonometry, 12; mechanical drawing, 6; Hindi, 6; and science, 6. The boy said that after finishing school, he intended to go to a Technical college, but he could study science only as a minor subject.

A headmaster in Delhi informed me that upon completion of the tenth classe, about half of the class usually do clerical, industrial, and farm work. Yet in this instance, the curriculum is designed for the approximately 37 per cent of the class who enter college.

Even in one of the best private schools in Madras, 40 per cent of those who finished the course went into business, clerical work or took a technical course. A government High school in the heart of a rural village in Kashmir offered no instruction in agriculture.

In a number of schools that I visited, an attempt is being made to offer a choice between simple and advanced mathematics, depending upon the ability of the student. Although this is a limited adjustment to the needs of the students, it is a step in the right direction. In one of the High schools in Madras, the student is permitted to choose between pure mathematics and applied mathematics, the former being intended for the better students. In a Delhi Girls' Higher Secondary school, the student may choose advanced mathematics, or a combination of lower mathematics and domestic science. Unfortunately, domestic science is studied by only a small percentage of the students, although half of the students will stay at home or marry after they finish the course.

In contrast the students of a High school for girls in Madras were more fortunate. The curriculum consisted of English, Tamil, mathematics, social studies, general science, music, needle work, and home science. With the exception of a few minor omissions, this programme of subjects not only included a good cross-section of the major fields of knowledge but also a course in home science. The framers of the curriculum had the foresight to realise that fifty per cent of the students would stay at home after leaving school and that the remainder were also potential home-makers.

Adjustment of the Curriculum to the Ability of Students

The low test scores accepted as the basis for advancement of the students from class to class as well as the high percentage of failures is a symptom of the basic need to adjust the curriculum to the learning ability of the students.

The standard passing mark on examinations is 33 per cent. As one headmaster said, "learning one-third is not real learning". Most headmasters, teachers and students whom I interviewed agreed that the passing mark should be raised to at least 50 per cent.

Most principals and headmasters also agreed that the Secondary school course is too hard and cumbersome for the average student. The most difficult and the least useful parts of the syllabi should be eliminated. Eventually the schools should set a higher standard of achievement, a greater mastery of what is to be learnt, and a higher passing mark of examinations.

In spite of the high percentage of failures, the framers of syllabi continue to include subject matter which is beyond the capacity of the average pupil. This view is supported by the findings of Mr. Thomas Sigsgard* who conducted an intensive survey of 1,200 representative pupils in class VIII of the Delhi schools. His data were based on intelligence and achievement tests, school marks and teachers' estimates of the pupils' ability. He concluded that a great number of students admitted to the Secondary school are destined to fail because they lack the ability to reach the required standard of achievement. He estimated that at least 60 per cent of the students in class VIII need simplified courses if they are to have a chance of rounding out their educational careers.

Progress from Class to Class

In most of the schools that I visited, the pupils in the High school were promoted by classes and not by subjects. In Delhi if a student fails in one subject he repeats the whole course. The promotion is based on the student's mark on the final examination, the passing mark being 33 per cent. The standards which determine the pupil's progress are based on the regulations issued by the directorate. The headmaster of one High school estimated that sixty per cent of the students pass the final examination. He said that he followed the liberal policy of promoting a student who fails in one subject to the next class provided he makes at least 20 per cent in this subject.

In Madras, the passing mark is 40 per cent in English and 35 per cent in other subjects. "It is a very poor standard", said the headmaster. "We are forced to that low level because our examination system emphasizes memory. Furthermore, teaching is not efficient enough to enable even 50 per cent of the students to pass unless the present level is maintained."

The headmaster of a Higher Secondary school in Srinagar said that the pupils who failed usually do not drop out. If necessary, they repeat the tenth class three times because scarcity of employment leaves them no other choice.

The policy of promotion by classes instead of by subjects entails an enormous waste of the student's time and energy. It is difficult for me to see what good it does the student to repeat what he already is supposed to know. There are boys who are very good in languages but do badly in mathematics and thus they are compelled to repeat all the subjects simply because they can not score the prescribed minimum in any one of them. A student may have scored well in four or five subjects but the poor performance in the sixth requires him to repeat all the subjects.

The remedy lies in the promotion or progress by subjects. This change according to several headmasters with whom I conferred is not difficult to make. Furthermore, they maintained that the individual school should formulate its own standards of promotion. They felt that promotion should be based not only on the final examination but also on monthly and terminal examinations as well as the student's general performance throughout the year.

Summary and Recommendations

In general, my views are in harmony with the recommendations of the Secondary Education Commission. Instead of reiterating what is contained in the report of the Commission, some of the more specific improvements based upon my school visits are here briefly summarized:

1. The headmasters and teachers should have a better understanding of the general aim of the school and of the several subjects that comprise the curriculum.
2. The High school curriculum neglects the problems of Indian democracy, the expressive arts, and special interests.
3. For those pupils who will not go to college, an excessive allotment of time to mathematics is unnecessary. At least half of the time allotment should be devoted to current living, art, drama, music and other useful subjects.
4. Hygiene and physiology which are optional in a number of school systems are so important for good living that they should be made compulsory.
5. The study of science should be given a more important place in the curriculum. Biology which is commonly neglected should be on a par with physics and chemistry. These subjects should be preceded by a study of general science in classes VI, VII and VIII.

6. The high percentage of failures should be reduced by eliminating the most difficult and least useful parts of the syllabi. If this is done, the school should set a higher standard of achievement and a higher passing mark on examinations.

7. The policy of requiring the student to repeat all the subjects if he fails in one of them, as is the common practice, entails an enormous waste of his time and energy. The remedy lies in the promotion or progress of the student subject by subject.

8. The High school stage should be expanded to include six classes. The enlarged staff and physical facilities would make it possible to teach more subjects; to offer a richer programme of electives; and to make a fuller use of the library, laboratory, and other physical facilities.

9. The small school should convert the co-curricular activities into an integral part of the curriculum by allotting one period a day for this purpose.

10. The Secondary school should give greater emphasis to student government. Self-governing activities constitute the best training for citizenship.

11. To supplement verbal learning, the teachers should introduce active, lifelike, and practical activities. They should provide more opportunities for pupils to learn to work together in small groups. They should give attention to the development of the skills in group discussion.

12. A beginning in the introduction of projects is particularly appropriate in the field of social studies. The project or unit of work should give the pupils an opportunity to participate in planning group work, research, reporting and the use of community resources.

CHAPTER VI

THE PROFESSIONAL GROWTH OF TEACHERS

The professional growth of the teacher is gradually gaining recognition in the schools of the Indian States. In addition to the services of inspectors, the State departments of education, with the cooperation of the Training colleges, have organized seminars, refresher courses, and extension lectures. Some States have embarked on an ambitious programme of short courses for teachers. Some school districts have conducted periodic meetings of their teaching staffs devoted to the improvement of teaching. The Union Ministry of Education has given some financial support to the establishment of departments of extension services in a selected group of Training colleges. The achievements as well as the suggested improvements in the in-service education of teachers are discussed in this chapter.

The Role of State Department of Education in Instructional Improvement

At the State level, education is under political as well as professional control. The Minister of Education is a political appointee while the Education Secretary and Director of Public Instruction are permanent professional officers who are appointed by the Public Service Commission.

Administrative Control is Divided

In most States the curriculum of the several divisions of the school system is controlled by separate administrative units. As a result the subjects lack unity and continuity from class I to class XI. For example, in Delhi, the Education Secretary indirectly controls the policy of the education directorate. The directorate controls the Middle schools; and the Board of Higher Secondary Education controls the Secondary schools.

Two States that I visited have consolidated the units of educational administration. In Madras, the State department of education has exclusive control of the syllabi from class I to class XI. Although the Commissioner for Government Examinations administers the examinations and issues a list of several approved textbooks in each subject, they are based on the syllabus produced by the subject committees of the Department of Education.

Recently the government of West Bengal has assumed direct responsibility for the control of Secondary education. The Secondary Education Board continues to exist but acts only in an advisory capacity*.

*Secondary Education, October 1956, p. 23.

Broadening the Membership of Administrative Boards

Several States have set up advisory boards but the representation of teachers is inadequate or completely neglected. The Board of Education in Orissa consists of the Minister of Education, the Education Secretary, the Director of Public Instruction, the Organizer of Basic Education and 20 non-official members. It meets twice a year. Its function is to advise the government in making policies.

The function of the Punjab Provincial Advisory Board is to advise the government in matters of educational policy, especially with regard to curriculum and syllabus. The Board consists of the Minister of Education, three officials of the department of education including the Director of Public Instruction, five principals of colleges, four headmasters of High schools and two lay persons. While the Provincial Advisory Board as now constituted performs a very useful function, it should become a more representative body by increasing the number of lay persons and adding headmasters of Primary and Middle schools as well as teachers to its membership.

The tendency for teachers to call strikes is an indication of the lack of regular channels of communication from teacher to administrator. The immediate solution is the establishment of an administrative advisory council made up of representatives of teachers, headmasters, administrative officers of Training colleges, and citizens. The long-range solution is the gradual introduction of the practice of permitting teachers to share in policy making. Labour-Management Councils are featured prominently in the press but I have yet to hear a work on administrative advisory councils in the field of public education.

The Educational Personnel of a State

The educational personnel in a typical State comprise Director of Education, Dy. Directors of Education, Asstt. Directors of Education, Inspectors of Schools, Asstt. Dy. Inspectors of Schools, Sub-Inspectors of Schools etc., etc. A few States have separate Director for Technical Education. Besides this, almost all the States have specialised personnel like Social Education Officer, Basic Education Officer, Planning Officer, the former for the supervision and inspection of Basic schools and social education centres and the latter for planning and implementation of educational development schemes. Sometimes there are officers exclusively for physical education, Sanskrit and Arabic, craft teaching etc., etc.

The Director of Education is overall incharge of educational administration in the State. He is assisted by the Dy. Directors and Asstt. Directors. The Inspectors of Schools are responsible for the administration and supervision of schools in their respective districts or divisions and are helped by the Asstt./Dy. Inspectors in the inspection of schools.

The administration of Primary schools is the responsibility of a District School Board. In Bombay, for example, the authority of the District School Board consisting of educationists is limited to educational functions. In the Act governing Primary education, the local board collects land revenue which is earmarked for education and credited to the school board.

In Punjab, there is an Assistant Director of Teacher Training in charge of the curriculum. With the cooperation of the Training colleges, he organizes such activities as seminars, camps, in-service courses and extension lectures. The post of Director of Teacher Training in Uttar Pradesh was created a year ago. The function of the Director is to supervise and coordinate training and research institutions of the State. He is expected to guide these institutions in the development of their policies and syllabi. Since the Director is responsible for the pre-service training of teachers, it is reasonable to expect the addition of a director who is responsible for the in-service education of teachers.

Addition of a Deputy Director of Curriculum and Instruction

Most State departments of education are pre-occupied with the numerous administrative problems arising out of the territorial enlargement of the States. The average State is primarily concerned with the extension of minimum schooling facilities to children of school-going age. It is attempting to implement the major reforms of the Second Five-Year Plan by the extension of the pattern of Basic education to the Primary and Middle schools and the introduction of diversified courses at the Secondary school level. In addition to these problems, the State department of education is engaged in the preparation of textbooks; providing pre-service and in-service education to teachers, a large proportion of whom are untrained; revising the syllabi from time to time; and performing the customary inspectorial functions.

With a very small staff, the administration of State school systems does not give enough emphasis to curriculum instruction and professional growth of teachers. The State department of education should add a deputy director of curriculum and instruction to its staff. This official should develop and carry out a programme of professional growth and in-service education of teachers. He should co-ordinate the services of Training colleges such as seminars, short courses, conferences and refresher courses. He should serve as the executive secretary of all curriculum committees, whether Elementary or Secondary. He should develop an on-going programme of curriculum improvement.

The Educational Status of the Teacher

A limited amount of professional growth of teachers is achieved indirectly by the State department of education through its standards of minimum qualifications for teachers, its salary schedule, the financial support of refresher courses, the services of the Training colleges, and presumably through the supervisory services of inspectors.

The qualifications of teachers vary from State to State and from school district to school district. As a rule, the Secondary school teachers have better qualifications than Elementary school teachers and the training of urban teachers is better than that of the rural teachers.

At best the Primary teacher is required to be a matriculate, that is, he must have successfully completed class X. In addition, he must have one or two years of training in a Primary Teacher Training school. For the Middle school teacher the qualifications are the same

but in addition, particularly in urban areas, he must have a knowledge of English. The High school teacher must have a bachelor's degree and one year of training in a Teachers college.

When I asked a headmaster whether salaries and qualifications for Elementary and Secondary school teachers should be equalized, he replied, "if all the teachers, both in the lower school and the High school, got the same salary, that would be the best arrangement. That will be difficult to achieve because this line of demarcation has been a tradition for many years. With better qualifications, if the teacher is paid less he is attracted to other professions. Nowadays fewer and fewer people are attracted to teaching because in other fields salary scales are better. It is only when trained hands are not available that untrained hands are employed."

I visited a number of Training colleges where I saw the young men and women who will shape the destinies of the citizens of tomorrow. In Howrah, I saw trainees who were teaching the children of a Basic school. The pupils were always at ease. I got the impression that these young teachers had the ability to evaluate what they were doing. They freely gave their opinions about the value of the subjects and the textbooks.

These young teachers had the resourcefulness and the freedom to make certain personal revisions in the syllabus. They supplemented the difficult selections in the vernacular with stories of their own choice. Having no guidance in the syllabi, these young teachers chose their own methods and procedures with the help of what they had learnt in the Training college. This experience gave me a glimpse into the bright future of public education in India.

In the meantime, the huge mass of untrained teachers presents a colossal problem to which some States have begun to give attention. In 1956, according to data obtained from the Statistical Division of the Ministry of Education, 39 per cent of the Primary, 49 per cent of the Middle, and 37 per cent of the High school teachers were untrained. The need for short courses for unqualified teachers will become increasingly pressing as the States gradually provide schooling for the millions of children in order to comply with the constitutional requirement of compulsory education up to the age of 14. For the present the growth of untrained teachers is in the hands of the busy headmaster or of trained teachers to whom this responsibility is sometimes assigned. In the future each State will have to plan its own programme of short courses to equip the untrained recruit to be a skillful teacher.

The In-Service Education of Teachers

The State departments of education are aware of the need for professional growth of both trained and untrained teachers. They have taken steps to provide various types of in-service education and have already held many workshops, seminars, and extension courses.

The scope of in-service education varies from State to State. Some States have launched an ambitious training programme. Rajasthan conducted refresher courses lasting three weeks during the autumn and summer vacations. The cost of transportation, board and lodging is provided by the government. In Orissa, the district

inspectors with the help of Training colleges conducted a seminar lasting six days for about 100 Primary teachers in each of the four regions or circles, as they are called. The State of Bombay held sammelans for a period of three days and short courses in physical training.

Some Basic schools that I have visited meet for a week before school opens to plan the year's work. A number of schools dismiss classes on the last Saturday of each month for a professional assembly of all teachers in several schools situated in the same neighbourhood. As the interest in the professional growth of teachers increases, the school districts should hold conferences for several days before the school year begins in order to plan the programme of professional activities for a series of monthly meetings. These monthly gatherings, lasting a full day, should include a general session, interest groups, grade meetings, and social or recreational activities.

The annual programme of in-service training should gradually become a self-governing enterprise in which the plans are made by planning committees consisting of administrators, heads of schools, and teachers. The Training college lecturers should be asked to serve as consultants. The best results will be accomplished through a reciprocal flow of ideas between teachers and administrators. The suggestions for instructional improvement should originate with teachers as well as school heads and clear through the planning committees. As the teachers share in planning they will come to regard the projects as their own and enter into the activities with greater enthusiasm.

Since the Training colleges are under the jurisdiction of the department of public instruction, the educational directorate is in a strategic position to enlist the services of the college lecturers in the improvement of instruction. The arrangements for such services could be carried out by the proposed deputy director of curriculum and instruction or by a deputy director of teacher training, an official now functioning in two States. When the teachers need guidance in any of the specified fields of instruction, a field course might be organized around the daily classroom problems of the teachers. An affiliation of a school district with a nearby Training college would provide the stimulation to greater personal and professional growth of the teaching corps. As curriculum planning becomes a more important function of the State department of education the competent Training college lecturers should be invited to serve as consultants to the general curriculum committees as well as subject committees.

The Value of Extension Services

A beginning in extending the services of the Training colleges to teachers has been made on an all-India basis. With the help of the Ministry of Education, the Ford Foundation and the United States Technical Cooperation Mission, 24 Training colleges have established departments of extension services experimentally for a period of three years beginning 1955-56. After the expiry of this first term of three years, the extension services will be continued for a further period up to March, 1961. Each of the Training colleges will receive a grant of Rs. 18,000 per annum from the All-India Council for Secondary Education and Rs. 6,000 from State Governments.

The project has been extended during 1957-58 to 30 additional Training colleges each of which will be provided with equipment from the Technical Cooperation Mission and a grant from the Ford Foundation and the Government of India. The All-India Council for Secondary Education will give Rs. 20,000 and the State Governments Rs. 6,000 to each of these colleges per annum. It is proposed to make the extension service department an integral part of every Training college. The expenditure will be shared equally by the Central Government and the State Governments.

To discontinue such services would be a major blunder. It would deprive the schools of the accumulated experience, the trained leadership, and the financial support which the field services now enjoy. There is little doubt that the extension services can and probably will survive in skeleton form even in those States which fail to appropriate the necessary funds. For example, a lecturer's load of 12 hours per week might include an extension course of two hours for teachers. The lecturer of mathematics could hold a week-end conference or the lecturer of science could give a demonstration of the use of improvised equipment for laboratory experiment. Such services would require only minor budgetary revisions.

The value of the extension services was clearly demonstrated on my round of the State school systems. The headmasters and teachers whom I interviewed were enthusiastic in their praise of the results. One headmaster said, "It has put new life into our school." The departments of extension services have conducted long and short term refresher courses, seminars, workshops, conferences, extension lectures, library services and advisory services to individual schools. The departments have also issued publications on educational problems, conducted educational tours, and loaned audio-visual equipment to schools.

Function of the Inspector

The inspector is one of the most controversial figures on the Indian scene. In most States he has a number of non-educational functions which consume much of his time. He checks the register, the cash book, and the payment of fees, the physical plant, and appraises the quality of the teacher's fitness.

The Inspector's Supervisory Services are Limited

Inspectors devote little time in helping teachers. Teachers fear the inspectors. They feel that the inspector comes to criticise. When I asked one headmaster to describe the attitude of the teachers toward the inspector, he said, "they are scared stiff". The school is visited by the inspector once every year. He spends about fifteen minutes in each room and at the end of the day gives a brief talk to the teachers or writes a general report of about one or two pages. He also writes his criticism in the log book. The samples which I saw were two or three sentences of very limited value in the improvement of teaching.

In all of my visits, I found one district inspector who was highly praised for his teaching demonstrations, conducting citizenship classes, helping to select library books, and guiding teachers in every possible way.

The difficulty lies in the ratio of inspectors to teachers. The head-mistress in one State estimated that there was one inspector to a thousand teachers. She suggested that there is need for one inspector for every four schools or approximately one inspector to two hundred teachers. This would enable him to make more frequent visits and be on friendly terms with teachers. Furthermore, in her opinion, the inspector should be relieved of some of the clerical work now required of him.

On one of my visits I travelled 25 miles to observe what was considered a unique school. On my arrival I was informed that the school was in the process of cleaning up in preparation for inspection. Two whole days were being devoted to the expected arrival of the inspector. Fortunately, the administrator, moved by my urgent plea, interrupted the cleaning long enough for the observation of a small slice of the school work.

The Inspector should become an Adviser

The State departments of education do not employ instructional supervisors or deputy directors whose major function is to improve the quality of teaching in the classroom. The only departure from this general policy was found in Orissa where the Board of Secondary Education had recently appointed experts (Supervisors) in English and science whose duty it was to help the teachers to improve the teaching of these subjects.

The inspectorial function should gradually be converted into a guidance function, with responsibility for the professional growth of teachers. With this change of function, the inspector should be given a title more suitable to his constructive and cooperative services. The deputy director of curriculum and instruction should serve as the head of the converted inspectorial staff. The inspectors should play a major role in the improvement of instruction and the in-service education of teachers. The State of Madras took a first step in this direction when it relieved the inspector of the duty of auditing books and changed his title to education officer.

The fearful attitude of the teacher toward the inspector indicates that the inspectorial process is in critical need of attention. The conversion of the inspector into a sympathetic instructional guide and counselor should be the result of a gradual educative process. Workshops and seminars for headmasters and teachers are becoming more common but thus far the in-service education of the inspector has been ignored.

The State directorate of education would do well to organize work conferences for inspectors and deputy inspectors. The conferences might consider such topics as difficulties in the way of the performance of the inspector's essential functions; ways of removing these difficulties; improvement of the relation between inspector and teacher; and the ways and means of converting inspection into guidance. They should explore the possibilities of forming a permanent association of inspectors for discussion of their problems.

Educational Leadership in the Individual School

The headmaster, more than any other person, can influence the quality of learning and teaching in a school. He is in a key position of leadership. He builds a common point of view, a willingness to improve, and a common loyalty. The headmaster should develop a better understanding of his opportunities to build a better school. Unfortunately, he is often occupied with many duties which interfere with his major function of instructional guidance.

The Headmaster should devote more time to Instructional Improvement

In addition to teaching seven periods a day, the headmistress of a government Junior Model school in Chandigarh makes a round of all the classes, does a lot of clerical work and checks diaries of the teachers every Monday. She writes letters, checks accounts, and talks to parents about their children for days during the admission period; she does no teaching at all. The class is merely given written work. The headmistress said that since she has to do two jobs, she cannot do justice to either.

Lacking adequate clerical help and saddled with an excessive teaching load, the headmaster can give very little time and attention to the improvement of teaching. The headmaster of a school employing eight or more teachers should have the help of a clerk and he should teach no more than two periods a day.

Since the teacher gets very little help from the inspector, he should be able to look to the headmaster for guidance. Instructional leadership varies from school to school. On the whole, I discovered a very limited amount of guidance by the administrative heads of the schools. Staff meetings in most schools are held about once a month and are devoted to routine matters and administrative details. Staff meetings should be more extensively devoted to the consideration of instructional problems. As one teacher put it, "more occasions should be provided for teachers to meet, to learn from each other, and to be encouraged to experiment."

The individual school should become more self-reliant and the headmaster should play a more important role in educational leadership. The most effective unit of instructional improvement is the individual school. The teachers work together, occupy the same building, and serve the same neighbourhood. It is easier for a staff to adjust the curriculum to the conditions of the particular community which the school serves.

The headmaster should take the initiative in organizing the staff for the continuous study of the basic teaching problems. The faculty should be divided into committees, each assuming responsibility for the study of one problem. Reports should be made from time to time leading to improvements in teaching.

It was refreshing to read the report of the seminar of headmasters of Secondary schools held under the auspices of the Bombay State Department of Education. It contained a free discussion of educational problems and served as a much needed outlet for constructive criticism.

The discussion of problems of Secondary education and the suggested solutions were convincing evidence of the potential educational progress which could result from greater participation of administrators in policy-making.

One headmistress in Delhi said that she belongs to an association of the heads of schools which meets haphazardly. On the other hand, she is a member of a group of heads of participating schools which are served by the Division of Extension Services of the Central Institute of Education. This group meets once a month. In addition the headmasters have an opportunity to attend special lectures and seminars. This is the germ of the in-service education of headmasters which should grow into a full-fledged organism.

Summary and Recommendations

1. The complete control of government schools should be vested in a single administrative department of education in order to eliminate the divided administration of schools.
2. The proposed exclusive control of the syllabi by the State department of education should make it possible to plan a continuous programme which parallels the growth of the individual.
3. In order to provide a regular channel of communication between teachers and administrators, the State department of education should establish an advisory council made up of representatives of teachers, headmasters, administrative officers, Training colleges, and citizens.
4. The State department of education should add a deputy director of curriculum and instruction to develop and carry out a programme of in-service education of teachers as well as to improve the curriculum.
5. The State department of education should provide more extensive short courses to equip the untried recruits to be skillful teachers.
6. The inspectors and headmasters should give greater emphasis to the professional growth of teachers.
7. The in-service education of teachers should gradually become a self-governing enterprise in which plans are made cooperatively by teachers and administrators.

8. The department of education should enlist the services of the Training colleges in a full-fledged programme of in-service education.
9. The departments of extension services now supported by the Central government should be made an integral part of every Training college, the State government assuming the responsibility for the major portion of the cost of their operation.
10. The fearful attitude of the teacher toward the inspector indicates that the inspectorial process is in need of immediate attention.
11. The inspector should gradually be converted into an educational adviser with responsibility for the improvement of instruction.
12. The individual school should become more self-reliant and the headmaster should play a more important role in educational leadership. Staff meetings should be more extensively devoted to instructional problems.

CHAPTER VII

CURRICULUM DEVELOPMENT IN INDIAN STATES

The process of curriculum development in the Indian States consists almost entirely of the production of syllabi. The responsibility for the production of Elementary school syllabi is lodged in the Department of Public Instruction. The curriculum of the Secondary schools is controlled by an independent statutory body usually known as the Board of Secondary Education, although the exact title varies from State to State.

While the Elementary school is usually divided into a Primary school including grades I—V and a Middle school including grades VI—VIII, the preparation of the syllabus is usually assigned to one committee. The Secondary school usually consists of grades IX—XI, the exact limits varying from State to State depending upon the provisions of the law defining the functions of the Board of Secondary Education.

Production of Elementary School Syllabi

1. The power to prescribe the curriculum of government or aided Elementary schools is vested in the government of each of the fourteen States and the six Union territories. The Director of Public Instruction of each State is the final authority for the issuance of the syllabus, although it must have the formal approval of the Education Secretary in the Ministry of Education of each State.

2. Whenever the need for the production of a syllabus arises, the Director of Public Instruction appoints a committee whose composition varies from State to State. It most frequently consists of inspectors, headmasters of schools and principals of Training colleges. In one State the committee also included teachers and lay persons.

3. The function of the syllabus committee varies from the routine drafting of topical outlines to the broader responsibilities of policy-making. Its duties may include the following: to select subjects for each class; to allot time to be devoted to each subject; to consider basic questions affecting the whole curriculum; to sketch a broad outline of the syllabus; and to recommend the syllabus to be followed in recognised Elementary schools. In one State the committee may recommend the textbooks to be used in the language subjects.

4. Although it is the function of the syllabus committee to recommend a syllabus to the Director of Public Instruction the process takes several forms. When the task of the syllabus committee consists of revising an old syllabus it always sits together and takes up one subject after another, making necessary revisions. When it is faced with the responsibility of rewriting the syllabus or making radical changes, in four States the task is performed by the whole committee. Even in these cases, the first draft is prepared by the most competent individual member of the committee whose manuscript is later examined and passed upon by the whole committee. In three States the responsibility is assigned to a subject committee consisting of

about two members of the syllabus committee and supplemented by specialists in each subject. In one State a district inspector actually wrote the syllabus in all subjects.

5. In two States the syllabus is scrutinized by a committee, and in one State by an expert, before it reaches the final authority. -

6. According to official procedure the syllabus is adopted after it has the approval of the Director of Public Instruction acting for the Department of Education, and the Education Secretary acting for the Government. In the last analysis the dual control is merely a matter of administrative procedure since the implementation of the syllabus is the responsibility of the Director of Public Instruction of each State. When the syllabus is printed it is distributed among the schools and is usually to be found in the headmaster's office. The teacher generally prepares his own outline by consulting a copy borrowed from the headmaster.

7. In four States the textbooks are written on the basis of the syllabi under the supervision of a Textbook Committee. In one State the syllabus committee specifies the textbooks in language subject only. In other States, presumably, the Textbook Committee selects the textbooks but they are not necessarily written under its supervision.

8. With two exceptions the syllabus consists of an outline of topics to be studied. It does not suggest how to teach; it merely specifies what to teach. The teacher is generally expected to follow the syllabus closely, but he may choose his own method of teaching.

Production of Secondary School Syllabi

1. The power to prescribe the curriculum of Secondary schools (classes IX—XI) is usually vested in a Board of Secondary Education in each State, although the particular name of this body may vary from State to State. In some States the Board of Secondary Education also controls the curriculum of Middle schools (classes VI—VIII). The Board of Secondary Education is usually an independent statutory body which consists of representatives of the State department of Education, the Universities, and headmasters and teachers of the Secondary schools. The State department of education maintains contacts with the Board through membership of State officials on the Board although at least two of the State departments have more direct control of the Board of Secondary Education. The functions and activities of the Board are administered by its Secretary. In three States that I visited the syllabus of the Secondary schools is prescribed by the university.

2. It is the function of the Board of Secondary Education to determine general policies which affect the curriculum directly or indirectly through examinations.

3. Every Board has a committee primarily concerned with the curriculum. It goes under a variety of names such as education committee or curriculum committee. The composition of this body varies from State to State but it most commonly consists of the conveners of syllabus committees and from five to ten members elected by the Board of Secondary Education.

4. It is the function of the curriculum committee to determine the patterns of compulsory and optional subjects, to propose the addition of new subjects; to appoint syllabus committees, (sometimes called course committees), to coordinate the reports of the syllabus committees; and, in some instances, to recommend and prescribe textbooks.

5. The syllabus committee for each subject usually consists of from three to six persons, some of whom are college lecturers and some Secondary school teachers. It is the function of the syllabus committee to draft a syllabus; to review an existing syllabus; and, in some instances, to recommend textbooks to the curriculum committee. Sometimes the syllabus committee passes on a syllabus prepared by an expert within or without the committee.

6. The syllabus committees, having drafted the syllabi in all the subjects, submit them to the curriculum committee, which usually approves them without much change.

7. Since the curriculum committee is a subdivision of the Board of Secondary Education, the syllabus must also have the approval of the entire Board, although this responsibility is sometimes assigned to the executive committee.

8. The Board's approval of the syllabus is usually final but in some States it must also have the approval of the Director of Education acting for the State department of education and the Education Secretary acting for the State government. Actually these latter stages are routine official sanctions which do not affect the content of the syllabus. In some States the syllabus is published under the authority of the Board of Secondary Education and in other States under the authority of the State department of education.

9. In some instances, the total curriculum of a Secondary school (classes IX—XI) is controlled through the subjects in which examinations are offered and through the prescription of textbooks. In all the cases, examinations follow the syllabus rigidly and are administered by the Board of Secondary Education. The teacher is expected to follow the syllabus and the textbook closely.

10. The syllabus begins with the description of curriculum patterns and is followed by a topical outline of each subject which defines its scope. The length of the syllabus in each subject usually varies from a few lines to about three pages.

11. In some States the syllabus committee prescribes or recommends textbooks; in other States the textbooks are selected and prescribed by a Textbook Committee.

Nature and Use of the Syllabus

Of all the syllabi produced by the Indian States, I have encountered only two which contained a foreword. The foreword stated who initiated the process; its purpose; the committees who did the work; the distinguishing features; the basic policy; and acknowledgement to those who directed the project. For the benefit of the professional and lay public, this foreword should also have described briefly the procedure followed in the production of the syllabus.

The syllabus usually consists of a brief outline of the topics covered in each of the subjects. It gives the impression that it was meant primarily for the authors and publishers of textbooks and only secondarily for teachers. The typical syllabus contains no statement of objectives, suggested activities, evaluation and source materials. Nearly every teacher and administrator who was interviewed agreed that the syllabus could be more helpful to the teacher if it told the teacher how to teach as well as what to teach.

In no case did the syllabus reveal the procedure used in determining what the children should learn. If I may be permitted to speculate, I would say that the writers used the following sources of subject matter:

1. Textbooks in use at the time which are considered satisfactory by the writers.
2. The syllabi of other schools, particularly those of respectable neighbouring school districts.
3. The generally accepted conventional outline of the subject approved by the authorities in the field.

The syllabus is usually kept in the headmaster's office. Sometimes it is summarized on large charts. The teacher prepares his own outline by consulting the copy in the headmaster's office. Frequently he merely follows the textbooks, the contents of which were determined by the syllabus. In those subjects for which textbooks are not available, the teacher depends upon the syllabus and his own knowledge of the subject in determining what to teach. In theory, where there are no examinations, nothing prevents the teachers from deviating from the syllabus. Generally speaking, however, the teacher adheres closely to the syllabus and to the textbook when it is available.

Occasionally individual schools publish their own syllabi. For example, the Government Model School, Chandigarh issues a handbook which contains not only the syllabus but also a diary in which the pupils enter their home work assignments daily. The teachers in Jamia Millia Islamia (Classes I to VI), Delhi, prepared a syllabus based upon their own teaching experience. It suggests that content should centre around interesting purposeful activities conducive to individual and social growth. Teaching suggestions are given for each of the seven subjects in the syllabus.

Three State departments of education have issued a handbook for teachers to accompany the informational content of the syllabus. This teaching guide is largely theoretical although it contains some suggestions for the teaching of some of the subjects. In order to use both the handbook and syllabus effectively, it becomes necessary for the teachers to match a specific topic with the corresponding teaching suggestions. The inclusion of the specifically helpful portions of the handbook in the syllabus would be more convenient for the teacher.

The usefulness of guide books is reflected in the following comment in an official document of the Punjab department of education: "The department prepared General Guide Books for teachers of Primary and Secondary departments as also three Guide Books in Physical Education, but these have not been made use of by the teachers to any great extent."

Review of Better Syllabi produced by Three States

Several syllabi, not restricted to a topical outline, were a distinct improvement over the average publication. The Punjab syllabus for Junior Basic, Primary and Middle departments contains not only factual information but also teaching suggestions. Detailed directions are also given to help the teacher carry out the suggested activities or projects in each class.

The Madras syllabus for forms I—III gives detailed suggestions for practical activities for each topic in mathematics. The syllabus in social studies contains an objective for each class, suggested activities, group work, and also includes a provision for one double period for activities requiring more than the usual amount of time. The organization of the school community is included under the heading of citizenship training.

The Jammu and Kashmir syllabus for Primary and Middle schools includes teaching suggestions and equipment as well as informational content. It suggests that real and varied activities are essential parts of the learning process. It also asks the teachers to make suggestions for the improvement of the syllabus.

The inclusion of practical activities in the afore-mentioned syllabi will undoubtedly vitalize learning in the classroom, but my observation of many classrooms in the States of Punjab, Madras, and Jammu and Kashmir convinced me that it is not enough to record the improved practices in the pages of the syllabus. It is necessary to orient the teachers through school visits, demonstrations, conferences, staff meetings, and supervisory services. In some cases even refresher courses will be needed to introduce a radically new approach such as the structural pattern method of teaching English.

A New Experience in Curriculum Planning

While in India, I had an opportunity to serve on the Delhi Syllabus Committee for classes I—VIII in an advisory capacity. In this situation, the production of the syllabus was motivated by the official requirement to adopt textbooks every three years. In other words, the Delhi State Textbook Committee was the parent of the Syllabus Committee. The syllabus was made at the top and handed down to the schools from above. The teachers and headmasters of Primary and Middle schools were not represented on the syllabus committee.

The members had completed the revision of the syllabi of two subjects and were about to tackle the third. When the question of the inclusion of teachers was raised, the committee, consisting of headmasters of Secondary schools, principals of Training colleges, and inspectors doubted whether teachers would have anything to contribute. Nevertheless, the members agreed to permit a handful of teachers to join them in planning and producing the syllabus.

At first the teachers were hesitant to speak but after one or two meetings they took a more active part in the discussion. When there was doubt concerning the difficulty of a topic the administrators gradually learned to turn to the teachers for guidance. When teachers were challenged to support their views they defended their positions convincingly with self-assurance and poise.

Such aspects of the syllabus as basic principles, objective teaching suggestions, and equipment, hitherto ignored by administrators, were discussed and readily accepted by teachers. As a result the syllabus was expanded from a topical outline of a half page to a full curriculum guide (syllabus) for the teachers.

The more deliberate approach took more than the customary amount of time to perform the task. The committee was repeatedly warned to speed up the completion of the project. Three months had been allotted for the revision of the old syllabus consisting of 13 subjects for classes I—VIII. But the production of a syllabus which will serve as a practical guide for teaching is not a speed-up process. It requires time, patience, and a knowledge of students as well as subject matter.

After much deliberation the science syllabus was approved by the Textbook Committee. The syllabus committee was directed to fan out into a series of committees working simultaneously on the remaining subjects in the Elementary schools. To carry out this project the syllabus committee became a sort of central committee which took a number of significant steps in curriculum planning. It asked the Directorate to give official recognition to the membership of the subject committees. A Planning meeting of the central syllabus committee was held including the conveners of each of the twelve subject committees. The central committee approved a carefully planned procedure for the guidance of each subject committee. It was agreed to permit each committee to adjust the procedure, if necessary, to its particular needs. It was, however, expected that as far as possible each topic or unit of work should include an objective, informational content, teaching suggestions and equipment.

The majority of the members of each subject committee consisted of teachers. For example, the social studies committee consisted of seven teachers, three headmasters, four members of educational bureaux, one inspector of schools, and one consultant. The conveners of two subject committees were classroom teachers, a significant departure from the hitherto authoritarian practice.

A coordinator was appointed to unify the work of the subject committees, to keep track of their progress, and to help them overcome their difficulties. The syllabus will be assembled and edited by the coordinator. Finally, the central committee will critically review the draft syllabi prepared by the subject committees and give its final approval.

Participation of Teachers in Curriculum Planning

The participation of teachers of Indian States in curriculum planning is very limited. The involvement of teachers is confined to the few persons in each subject who are members of a syllabus committee. Even when the syllabus committee includes a few teachers, the draft is frequently prepared by a specialist whose manuscript is read and passed upon by the whole committee. The assigned writer is not necessarily a school teacher. He may be a college lecturer.

Review of Better Syllabi produced by Three States

Several syllabi, not restricted to a topical outline, were a distinct improvement over the average publication. The Punjab syllabus for Junior Basic, Primary and Middle departments contains not only factual information but also teaching suggestions. Detailed directions are also given to help the teacher carry out the suggested activities or projects in each class.

The Madras syllabus for forms I—III gives detailed suggestions for practical activities for each topic in mathematics. The syllabus in social studies contains an objective for each class, suggested activities, group work, and also includes a provision for one double period for activities requiring more than the usual amount of time. The organization of the school community is included under the heading of citizenship training.

The Jammu and Kashmir syllabus for Primary and Middle schools includes teaching suggestions and equipment as well as informational content. It suggests that real and varied activities are essential parts of the learning process. It also asks the teachers to make suggestions for the improvement of the syllabus.

The inclusion of practical activities in the afore-mentioned syllabi will undoubtedly vitalize learning in the classroom, but my observation of many classrooms in the States of Punjab, Madras, and Jammu and Kashmir convinced me that it is not enough to record the improved practices in the pages of the syllabus. It is necessary to orient the teachers through school visits, demonstrations, conferences, staff meetings, and supervisory services. In some cases even refresher courses will be needed to introduce a radically new approach such as the structural pattern method of teaching English.

A New Experience in Curriculum Planning

While in India, I had an opportunity to serve on the Delhi Syllabus Committee for classes I—VIII in an advisory capacity. In this situation, the production of the syllabus was motivated by the official requirement to adopt textbooks every three years. In other words, the Delhi State Textbook Committee was the parent of the Syllabus Committee. The syllabus was made at the top and handed down to the schools from above. The teachers and headmasters of Primary and Middle schools were not represented on the syllabus committee.

The members had completed the revision of the syllabi of two subjects and were about to tackle the third. When the question of the inclusion of teachers was raised, the committee, consisting of headmasters of Secondary schools, principals of Training colleges, and inspectors doubted whether teachers would have anything to contribute. Nevertheless, the members agreed to permit a handful of teachers to join them in planning and producing the syllabus.

At first the teachers were hesitant to speak but after one or two meetings they took a more active part in the discussion. When there was doubt concerning the difficulty of a topic the administrators gradually learned to turn to the teachers for guidance. When teachers were challenged to support their views they defended their positions convincingly with self-assurance and poise.

Such aspects of the syllabus as basic principles, objectives, teaching suggestions, and equipment, hitherto ignored by administrators, were discussed and readily accepted by teachers. As a result the syllabus was expanded from a topical outline of a half page to a full curriculum guide (syllabus) for the teachers.

The more deliberate approach took more than the customary amount of time to perform the task. The committee was repeatedly warned to speed up the completion of the project. Three months had been allotted for the revision of the old syllabus consisting of 13 subjects for classes I—VIII. But the production of a syllabus which will serve as a practical guide for teaching is not a speed-up process. It requires time, patience, and a knowledge of students as well as subject matter.

After much deliberation the science syllabus was approved by the Textbook Committee. The syllabus committee was directed to fan out into a series of committees working simultaneously on the remaining subjects in the Elementary schools. To carry out this project the syllabus committee became a sort of central committee which took a number of significant steps in curriculum planning. It asked the Directorate to give official recognition to the membership of the subject committees. A Planning meeting of the central syllabus committee was held including the conveners of each of the twelve subject committees. The central committee approved a carefully planned procedure for the guidance of each subject committee. It was agreed to permit each committee to adjust the procedure, if necessary, to its particular needs. It was, however, expected that as far as possible each topic or unit of work should include an objective, informational content, teaching suggestions and equipment.

The majority of the members of each subject committee consisted of teachers. For example, the social studies committee consisted of seven teachers, three headmasters, four members of educational bureaux, one inspector of schools, and one consultant. The conveners of two subject committees were classroom teachers, a significant departure from the hitherto authoritarian practice.

A coordinator was appointed to unify the work of the subject committees, to keep track of their progress, and to help them overcome their difficulties. The syllabus will be assembled and edited by the coordinator. Finally, the central committee will critically review the draft syllabi prepared by the subject committees and give its final approval.

Participation of Teachers in Curriculum Planning

The participation of teachers of Indian States in curriculum planning is very limited. The involvement of teachers is confined to the few persons in each subject who are members of a syllabus committee. Even when the syllabus committee includes a few teachers, the draft is frequently prepared by a specialist whose manuscript is read and passed upon by the whole committee. The assigned writer is not necessarily a school teacher. He may be a college lecturer.

My study of the production of syllabi has convinced me that the educational administrators have not begun to tap the rich human resources for progress that lie in the participation of teachers in curriculum planning.

The writers of syllabi are not always close enough to the needs of the school to be realistic. For example, the headmaster and students of one school whom I interviewed showed remarkable agreement on the need to add practical subjects. The headmaster suggested carpentry, typing and handicrafts. The students in the tenth class suggested wood work, metal work and crafts.

At the end of a day of observation in a Middle school in Delhi, I was invited to join the faculty for tea in the staff room. It was a very pleasant and informal meeting, lasting about one hour. The assembled teachers commented freely and asked questions which dealt with the syllabus and other instructional problems. Among other significant comments, the teachers agreed that the syllabus should contain general suggestions and also specific suggestions on how to teach each major topic. Very few syllabi at the present time contain any teaching suggestions.

My contacts with headmasters, teachers and pupils in a score of schools lead me to conclude that field work is indispensable in guiding the development of a syllabus. At the present time, there is a complete absence of contact between the framers of the syllabus and the teachers whom it is designed to serve.

The reaction of teachers to a syllabus was sought by the educational directorates of two States. The Secretary of the Syllabus Revision Committee in Punjab circulated a cyclostyled invitation to selected headmasters of good High and Middle schools to send suggestions and comments for the revision of the old syllabus. Under the direction of a special officer in Madras, the syllabi were drafted for the various subjects from class I to class XI. A thousand printed copies were distributed among the deputy inspectors who were asked to appoint a rural and an urban committee. Each committee studied the syllabus and submitted its comments. The special officer compiled the comments for each subject, arranged the suggestions in tabular form, and returned them to the convener of each committee for final revision. This submission of a draft syllabus in Madras to the criticism of teachers is highly desirable but the directorate might go one step further and gather the suggested improvements after the teachers have used the revised syllabus.

Suggested Procedure in the Production of a Syllabus

The proposed procedure which was given general acceptance by the Delhi Syllabus committee is here outlined in the hope that it may be helpful to other groups engaged in curriculum planning. Since it is based substantially on the experience of the science sub-committee, it cannot be charged that it is visionary and impractical. The suggested steps were as follows:

1. Determine the general aims of the subject.

2. Set down a few basic principles pertinent to the subject to guide the members of the subject committee. For example, the science

committee agreed that 'teaching in the lower grades should be based upon children's observations and experiences'. Consequently it included many practical activities in the body of the syllabus.

3. Determine the weekly time that should be allotted to the subject in each class.

4. Develop a chart showing the scope and sequence of a subject for classes I—VIII. The committee should first consider the possibility of synthesizing the existing traditional and Basic syllabi. The committee proceeds to outline class by class what is to be learnt and when it is to be learnt. For example, the scope of arithmetic includes measurement as one aspect. The committee then proceeds to outline what should be learnt in one class after another about such units of measurement as liquids, weight, time, money and length. Thus the committee has a complete overview of the subject from class I to class VIII before beginning to write the body of the syllabus.

5. Using the scope and sequence chart, develop an outline of units or topics for each class and give the specific objectives of each unit or topic. For example, the syllabus in science for class III contains the following units:

Animal Life—To know the common animals, birds and insects around us

Plant Life—To understand the growth of plants and their needs

Rocks and Soils—To become familiar with rocks and soils

Heavenly Bodies—To understand the nature of the sun, moon, and stars

Health—To form habits of cleanliness

Food—To know how food makes the body grow.

6. Prepare a brief statement of general suggestions to the teacher bearing in mind the general aims and the guiding principles. These general suggestions may cover such items as:

a. The nature of the learning activities

b. Informational content

c. The use of teaching aids

d. How to evaluate the results of learning

e. How to handle individual differences in learning ability.

7. Formulate the outline of a unit of work or topic. In other words, what should the contributor include in each unit of work or topic. For example, the science committee included the following:

a. Objective

b. Informational content

c. Teaching suggestions

d. Equipment and source materials.

8. Plan the preparation of the body of syllabus. Assign specific units or topics to each member of the committee. This may be done vertically by topics or horizontally by classes. For example, in science the writer may prepare the material on plant life for classes I—VIII, or he may prepare all the units or topics for one particular class.

My study of the production of syllabi has convinced me that the educational administrators have not begun to tap the rich human resources for progress that lie in the participation of teachers in curriculum planning.

The writers of syllabi are not always close enough to the needs of the school to be realistic. For example, the headmaster and students of one school whom I interviewed showed remarkable agreement on the need to add practical subjects. The headmaster suggested carpentry, typing and handicrafts. The students in the tenth class suggested wood work, metal work and crafts.

At the end of a day of observation in a Middle school in Delhi, I was invited to join the faculty for tea in the staff room. It was a very pleasant and informal meeting, lasting about one hour. The assembled teachers commented freely and asked questions which dealt with the syllabus and other instructional problems. Among other significant comments, the teachers agreed that the syllabus should contain general suggestions and also specific suggestions on how to teach each major topic. Very few syllabi at the present time contain any teaching suggestions.

My contacts with headmasters, teachers and pupils in a score of schools lead me to conclude that field work is indispensable in guiding the development of a syllabus. At the present time, there is a complete absence of contact between the framers of the syllabus and the teachers whom it is designed to serve.

The reaction of teachers to a syllabus was sought by the educational directorates of two States. The Secretary of the Syllabus Revision Committee in Punjab circulated a cyclostyled invitation to selected headmasters of good High and Middle schools to send suggestions and comments for the revision of the old syllabus. Under the direction of a special officer in Madras, the syllabi were drafted for the various subjects from class I to class XI. A thousand printed copies were distributed among the deputy inspectors who were asked to appoint a rural and an urban committee. Each committee studied the syllabus and submitted its comments. The special officer compiled the comments for each subject, arranged the suggestions in tabular form, and returned them to the convener of each committee for final revision. This submission of a draft syllabus in Madras to the criticism of teachers is highly desirable but the directorate might go one step further and gather the suggested improvements after the teachers have used the revised syllabus.

Suggested Procedure in the Production of a Syllabus

The proposed procedure which was given general acceptance by the Delhi Syllabus committee is here outlined in the hope that it may be helpful to other groups engaged in curriculum planning. Since it is based substantially on the experience of the science sub-committee, it cannot be charged that it is visionary and impractical. The suggested steps were as follows:

1. Determine the general aims of the subject.
2. Set down a few basic principles pertinent to the subject to guide the members of the subject committee. For example, the science

committee agreed that 'teaching in the lower grades should be based upon children's observations and experiences'. Consequently it included many practical activities in the body of the syllabus.

3. Determine the weekly time that should be allotted to the subject in each class.

4. Develop a chart showing the scope and sequence of a subject for classes I—VIII. The committee should first consider the possibility of synthesizing the existing traditional and Basic syllabi. The committee proceeds to outline class by class what is to be learnt and when it is to be learnt. For example, the scope of arithmetic includes measurement as one aspect. The committee then proceeds to outline what should be learnt in one class after another about such units of measurement as liquids, weight, time, money and length. Thus the committee has a complete overview of the subject from class I to class VIII before beginning to write the body of the syllabus.

5. Using the scope and sequence chart, develop an outline of units or topics for each class and give the specific objectives of each unit or topic. For example, the syllabus in science for class III contains the following units:

Animal Life—To know the common animals, birds and insects around us

Plant Life—To understand the growth of plants and their needs

Rocks and Soils—To become familiar with rocks and soils

Heavenly Bodies—To understand the nature of the sun, moon, and stars

Health—To form habits of cleanliness

Food—To know how food makes the body grow.

6. Prepare a brief statement of general suggestions to the teacher bearing in mind the general aims and the guiding principles. These general suggestions may cover such items as:

- a. The nature of the learning activities
- b. Informational content
- c. The use of teaching aids
- d. How to evaluate the results of learning
- e. How to handle individual differences in learning ability.

7. Formulate the outline of a unit of work or topic. In other words, what should the contributor include in each unit of work or topic. For example, the science committee included the following:

- a. Objective
- b. Informational content
- c. Teaching suggestions
- d. Equipment and source materials.

8. Plan the preparation of the body of syllabus. Assign specific units or topics to each member of the committee. This may be done vertically by topics or horizontally by classes. For example, in science the writer may prepare the material on plant life for classes I—VIII, or he may prepare all the units or topics for one particular class.

9. Distribute each writer's draft among the members of the subject committee for their comments in advance of the meeting.
10. Each subject committee meets for consideration of the drafts of the individual members and approves them.
11. The final drafts of the subject committees are submitted to the central syllabus committee for its approval.

Curriculum Planning is a Cooperative Enterprise

The discussion thus far may give the impression that the production of syllabi and curriculum development are identical. The curriculum consists of all the experiences of the student under the guidance of the teacher. It is the total life of the school. On the other hand, the syllabus is a printed guide to what the student should learn in a particular subject. The production of a syllabus is a logical step in the improvement of the curriculum. It is not a substitute for curriculum development.

Broadly speaking the purpose of curriculum planning is to raise the level of individual and group living in a democracy; to improve learning in the classroom; to stimulate teachers to grow personally and professionally; and to build a cooperative and united corps of teachers.

About thirty years ago there was a strong tendency in the United States to assign the task of curriculum planning to the expert. Three decades of experience in cooperative programmes of curriculum development have taught us that the greatest amount of individual growth comes from active participation in planning, experimenting, and evaluating teaching and learning. It is this discovery which has revolutionized the process of curriculum development. Today the syllabi are almost invariably prepared by committees of teachers working cooperatively with administrators and consultants.

For example, the steps followed in the development of the Secondary school syllabus in one American State are as follows:

1. Urgent demand for a new publication or a revision of an existing one
2. Appointment of curriculum committee of outstanding teachers by Board of Regents
3. Committee meetings devoted to recommendations and planning
4. Development of manuscript draft by consultants and staff in cooperation with the supervisor responsible for the area
5. Revision of draft by syllabus committee
6. Preparation of a small mimeographed edition
7. Experimental use of material by selected schools
8. Evaluation of reports on experimental use
9. Development of final manuscript copy
10. Editing and printing.

For many years I served as consultant to an American county school programme of curriculum improvement in which the teachers played a major role. The individual school problems were submitted

to the county planning committee which consisted of teachers, the supervisor, the superintendent, and the representatives of the local college, the State department of education, and the community service agencies.

Wide and varied responsibilities were assumed by teachers in the programme. Teachers served in the following capacities: chairman or member of the planning committee; leader, assistant leader, or recorder of special interest groups; chairman of general meetings of teachers; leader of individual school faculty; and member of social, professional library, or radio committee. At the end of the school year, the teachers evaluated the programme in the light of the objectives laid down at the beginning of the year.

The widest participation of teachers comes from group planning and group responsibility. Every teacher is drawn into the programme and every contribution and suggestion is given respectful consideration. The working group pauses from time to time to evaluate its progress and to change its direction if it wishes to do so. The decisions of working groups are always respected and followed. Before a syllabus is finally adopted, the teachers frequently have an opportunity to give it a trial in the classroom.

The technique of group planning does not come naturally to most people. It has to be learnt by practice. The members of the group develop respect for each other. They cultivate the ability to give and to take constructive criticism. They learn to differ cheerfully in order to arrive at the best cooperative thinking of all the participants.

Curriculum Planning requires Educational Leadership

The work of the Delhi Syllabus Committee, commendable as it was, by no means represents a complete process of curriculum development. The complete process in curriculum development should have included the following phases:

1. The administration of the project is the responsibility of the deputy director of curriculum and instruction.
2. The central curriculum committee is a policy-making body. Its functions are to consider the basic conditions and factors in Indian education today; to formulate a point of view; to determine general aims; to chart the framework of the total curriculum; to set forth the nature of the basic learning unit; and to discuss other basic issues affecting all subjects.
3. The central curriculum committee includes a number of representative teachers.
4. The cooperation of all the teachers in suggesting the content and the activities of the curriculum is enlisted.
5. The syllabus is introduced through orientation conferences, demonstrations, teachers' meetings, seminars, and the like.

In no State is there a permanent officer responsible for curriculum development. Partial or temporary supervision of the production of syllabi was found in four States.

In Madras and Mysore revision of the curriculum is the responsibility of one special officer. He is an embryonic deputy director of curriculum and instruction who unfortunately does not become a full-grown organism. His existence ceases when the syllabus is produced. The special officer in Madras indicated that his committee recommended several steps for the implementation of the syllabus, such as refresher courses. Why should he not become a permanent deputy director of curriculum and instruction charged with the responsibility of directing the continuous improvement of instructions?

The Director of Public Instruction in Mysore reported that "the setting up of a Bureau for studying curriculum problems is under consideration." While it is too much to expect the directorate to make this immediate radical change, it is encouraging to know that one State department of education has expressed an awareness of the need of intensive study of the curriculum.

In the State of Punjab, the Assistant Director of Teacher Training is the head of the syllabus committee. This is an example of assigning the task of curriculum improvement to an official in the State department of education. It is to be regretted, however, that following the common practice, the Assistant Director of Teacher Training practically made revisions of the syllabus himself. Ultimately, the production of syllabi should be the product of many teachers and headmasters working together under his direction.

The Need for a Deputy Director of Curriculum

Earlier in this monograph, I have suggested the addition of a deputy director of curriculum and instruction who should be responsible for the professional growth of teachers with major emphasis on the continuous improvement of the curriculum. It was pointed out that it was his function to organize a programme of in-service education of teachers and administrators; to coordinate such projects as seminars, short courses, conferences, and refresher courses; and to administer the services of inspectors. In addition, he should serve as the directing head of all central curriculum committees and perform the following duties:

1. Encourage regional and district inspectors to organize programmes of instructional improvement.
2. Conduct curriculum conferences for inspectors, headmasters and teachers.
3. Encourage Training colleges to organize seminars and workshops on leadership in curriculum development.
4. Establish experimental centres for school improvement.
5. Stimulate headmasters to organize pre-school conferences of teachers for the study of their teaching problems.
6. Make such plans for the induction of new syllabi as demonstrations, staff meetings, and advisory services.
7. Encourage headmasters to conduct staff meetings which give greater attention to instructional problems.

As executive secretary of the central curriculum committee, the deputy director of curriculum and instruction has an opportunity to broaden and improve its services. The central curriculum committee should be a policy-making body. It should deal with such, basic factors as the role of education in free India; the general aims of education; the framework of a balanced curriculum; the nature of the learning unit; the scope and sequence of the curriculum; and similar significant matters. The preparation of syllabi in the various subjects should be delegated to a series of production or subject committees consisting largely of teachers but also including inspectors, headmasters, Training college lecturers, and consultants.

Curriculum Development releases Creative Talents of Teachers

Administrative changes will be only partially productive without the acceptance of a new spirit of mutual respect and cooperation among all educational workers regardless of rank. A headmaster addressing a seminar charged that Secondary education suffers from a fear complex: "Pupils are afraid of the teachers, the teachers of the headmasters, and the headmasters of the inspecting officers."

I heard a high official say that teachers in his State have not yet developed a civic responsibility and that until they do, they are not justified in expecting greater freedom. Freedom is learnt only through freedom to make choices and to think creatively. The educationists in his school system are ready for greater freedom but unfortunately they feel rigidly controlled by the directives of the administration.

It is necessary to create the conditions conducive to the free expression of opinion. There is a desperate need to release the latent talent of teachers and principals that, according to one of my associates, "lies buried under mud". There is a dire need to give all educational workers an outlet for the creative impulses that hunger for expression.

Summary and Recommendations

1. As indicated elsewhere, the deputy director of curriculum and instruction should be responsible for the professional growth of teachers with major emphasis on the continuous improvement of the curriculum.
2. The deputy director of curriculum and instruction should organize a programme of in-service education of teachers and administrators; coordinate seminars, conferences and short courses; and direct the services of inspectors.
3. The central curriculum committee should be a policy-making body. It should be headed by the deputy director of curriculum and instruction and should include not only administrators but also teachers.
4. The preparation of a syllabus should be delegated to a series of production or subject committees consisting largely of teachers but including inspectors, headmasters, Training college lecturers, and consultants.

5. The production of a syllabus should begin with the determination of general aims. It should include the development of a chart showing the scope and sequence of topics class by class. The services of the teachers should be enlisted in developing each topic or unit in detail. The suggested procedure is outlined in the body of this chapter.

6. Each unit or topic in the syllabus should contain not only the informational content, but also the objectives, suggested activities and the source materials.

7. Before a syllabus is finally adopted, the teachers should have an opportunity to give it a trial in the classroom.

8. The educational administrators should tap the rich human resources for educational progress that lie in the participation of teachers in curriculum planning. Many teachers should be drawn into the production of a syllabus. Their suggestions should be given respectful consideration.

